HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

RX1 CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION
KDL-19M4000	RM-YD025	US
KDL-19M4000	RM-YD025W	US
KDL-19M4000	RM-YD025	CANADA
KDL-19M4000	RM-YD025W	CANADA
KDL-19M4000	RM-YD025	MEXICO
KDL-19M4000	RM-YD025W	MEXICO

ORIGINAL MANUAL ISSUE DATE: 3/2008

☛ **:UPDATED ITEM**

REVISION DATE	SUBJECT
3/2008	No revisions or updates are applicable at this time.
4/2008	Reissue entire manual to include PWBs for G Board (Power Supply) Added Line Art illustration for Wire Dressing Added PNs for Colored Bezels to Exploded View section.
5/2008	Corrected instructions for 2-1. Resetting to Factory Defaults After Board Replacement. Replaced page 17.
5/2008	Corrected PNs for White and Black Front Bezel Assemblies. Replaced page 43.
10/2008	Removed Self Diagnosis logo from Front Cover and Self Diagnostic Function page. Replaced pages 2 and 10.
12/2008	Corrected H2 Board and H3 Board information. Replaced pages 13, 15, 16, 18, 21, & 38-39.
8/2009	Corrected H2 Board and H3 Board information. Replaced pages 3, 13, 15, 16, 18, 21, 38, 39, & 43.

LCD DIGITAL COLOR TELEVISION

SONY®

9-883-775-07

SERVICE MANUAL

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KDL-19M4000	RM-YD025	MEXICO
KDL-19M4000	RM-YD025W	MEXICO

BRAVIA
SONY

KDL-19M4000

DISPLAY
SLEEP
POWER
FAVORITES
INPUT
RETURN
TOOLS
MENU
CC
JUMP
1
2
3
4
5
6
7
8
9
0
ENT
VOL
CH
MUTING
SONY
TV

RM-YD025

LCD DIGITAL COLOR TELEVISION

SONY®

9-883-775-07

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SPECIFICATIONS

Power Requirements

120V - 240V AC, 50/60Hz

VIDEO (IN) 1/2

S Video (4-Pin Mini DIN) (Video 2 only)

Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms

Video

1.0 Vp-p, 75 ohms unbalanced, sync negative

Audio

500 mVrms (100% modulation)
Impedance:47 kilohms

COMPONENT IN:

YP_BP_R (Component Video)

Y:1.0 Vp-p, 75 ohms unbalanced, sync negative
P_B:0.7 Vp-p, 75 ohms
P_R:0.7 Vp-p, 75 ohms
Signal format: 480i, 480p, 720p, 1080i, 1080p

Audio

500 mVrms (100% modulation)
Impedance: 47 kilohms

HDMI IN:

HDMI

Video: 480i, 480p, 720p, 1080i
Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16 bits

Audio

500 mVrms (100% modulation)
Impedance: 47 kilohms

AUDIO OUT:

500 mVrms (100% modulation)

PC IN:

D-sub 15-pin, analog RGB, 0.7 Vp-p, 75 ohms, positive

PC AUDIO IN:

Stereo mini jack, 500mVrms, 47 kilohms

HEADPHONES:

Stereo mini jack
Impedance: 16 ohms

Trademark Information

Macintosh is a trademark of Apple Inc., registered in the U.S. and other countries.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

Blu-ray Disc is a trademark.

“BRAVIA”, BRAVIA and ▣ are trademarks of Sony Corporation.

Design and specifications are subject to change without notice.

	KDL-19M4000
Power Consumption	
in use	53W
in standby	Less than 1.0 W
Speaker Output (W)	3W + 3W
mm	40 x 100 mm
in	$1^{5/8}$ x 4 in
Dimensions (W x H x D) with stand and handle	
mm	485 x 165 x 400 mm
in	$19^{1/8}$ x $6^{1/2}$ x $15^{3/4}$ in
Dimensions (W x H x D) without stand and handle	
mm	485 x 85 x 401 mm
in	$19^{1/8}$ x $3^{3/8}$ x $15^{7/8}$ in
Mass with stand and handle	
kg	7.8 kg
lbs	17 lbs 2 oz
without stand and handle	
kg	6.9 kg
lbs	15 lbs 2 oz

All measurements are approximations.

Television system

NTSC	American TV Standard
ATSC (8VSB terrestrial)	ATSC Compliant 8VSB
QAM on cable	ANSI/SCTE 07 2000

Channel coverage

	Analog	**Digital**
Terrestrial	2-69	2-69
Cable	1-135	1-135

Antenna

75-ohm external terminal for VHF/UHF

Panel System

LCD (Liquid Crystal Display) Panel

Display Resolution (horizontal x vertical):

1440 dots x 900 lines

Screen Size (measured diagonally)

approx. 19 inches

Supplied Accessories

Remote Commander RM-YD025 or RM-YD025W
Size AA Batteries (2)
AC Power Cord
Cable Band
Operating Instructions
Quick Setup Guide
Warranty Card
Online Registration Card (USA only)

Optional Accessories

Headphones Plug Adapter
Connecting Cables
Wall-Mount Bracket
SU-WL100

WARNINGS AND CAUTIONS

CAUTION

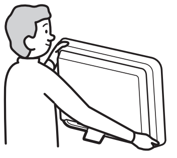
These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

CARRYING THE TV

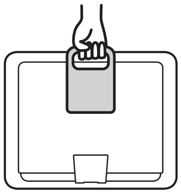
Carry the TV in the specified manner

To avoid dropping the TV and causing serious injury, be sure to follow these guidelines:

- ☐ Before carrying the TV, disconnect all cables.
- ☐ When you carry the TV without handle, place your hand as illustrated and hold it securely. Do not put stress on the LCD panel.
- ☐ When carrying the TV, do not subject it to shocks or vibration, or excessive force.



Without handle



With handle

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.

⚠ SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

ATTENTION!!

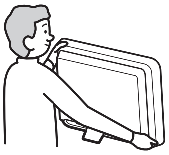
Ces instructions de service sont à l’usage du personnel de service qualifié seulement. Pour prévenir le risque de choc électrique, ne pas faire l’entretien autre que celui contenu dans le Mode d’emploi à moins que vous soyez qualifié faire ainsi.

POUR TRANSPORTER LE TÉLÉVISEUR

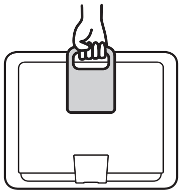
Transport du téléviseur de la manière précisée

Assurez-vous de suivre ces consignes pour éviter de laisser tomber le téléviseur et de provoquer des blessures graves :

- ☐ Débranchez tous les câbles avant de transporter le téléviseur.
- ☐ Transportez le téléviseur en plaçant les mains tel qu’illustré et le tenir solidement. N’appliquez pas de pression sur l’écran ACL.
- ☐ Lorsque vous transportez le téléviseur, ne le soumettez pas à des chocs ou vibrations, ni à une force excessive.



Sans poignee de transport



Avec poignee de transport

Afin d’eviter tout risque d’electrocution provenant d’un chássis sous tension, un transformateur d’isolement doit etre utilisé lors de tout dépannage. Le chássis de ce récepteur est directement raccordé à l’alimentation du secteur.

⚠ ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifies par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d’une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l’importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu’un mauvais fonctionnement suspecte.

SAFETY-RELATED COMPONENT WARNING

There are critical components used in LCD color TVs that are important for safety. These components are identified with shading and ⚠ mark on the schematic diagrams and the electrical parts list. It is essential that these critical parts be replaced only with the part number specified in the electrical parts list to prevent electric shock, fire, or other hazard.

NOTE: Do not modify the original design without obtaining written permission from the manufacturer or you will void the original parts and labor guarantee.

USE CAUTION WHEN HANDLING THE LCD PANEL

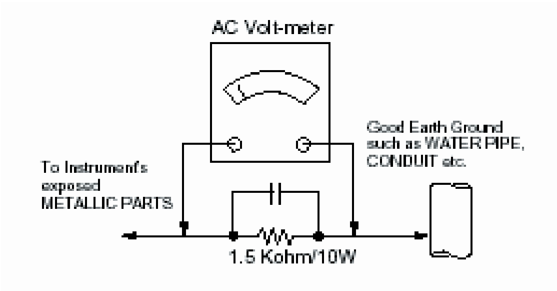
When repairing the LCD panel, be sure you are grounded by using a wrist band.

When installing the LCD panel on a wall, the LCD panel must be secured using the 4 mounting holes on the rear cover.

To avoid damaging the LCD panel:

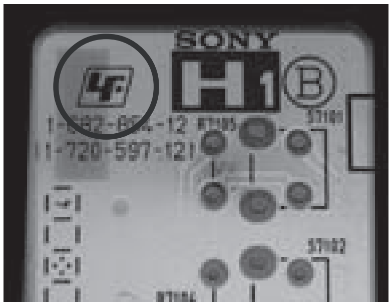
- do not press on the panel or frame edge to avoid the risk of electric shock.
- do not scratch or press on the panel with any sharp objects.
- do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
- do not expose the LCD panel to direct sunlight.
- avoid contact with water. It may cause a short circuit within the module.
- disconnect the AC adapter when replacing the backlight (CCFL) or inverter circuit.
  (High voltage occurs at the inverter circuit at 650Vrms.)
- always clean the LCD panel with a soft cloth material.
- use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short.
- protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).

LEAKAGE CURRENT HOT CHECK CIRCUIT



The circuit boards used in these models have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation e.g. H1 etc [see example]. The servicing of these boards requires special precautions to be taken as outlined below.

example 1



It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints.
Lead Free Solder is available under the following part numbers :

Part number	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to the higher melting point of Lead Free Solder the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

For more information on the use of Lead Free Solder, please refer to *http://www.sony-training.com*

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliampmeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble- light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

Leakage Test

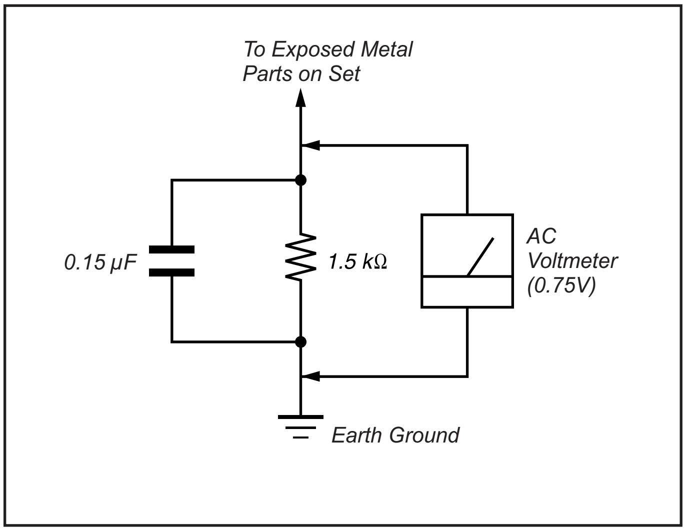


Figure A. Using an AC voltmeter to check AC leakage.

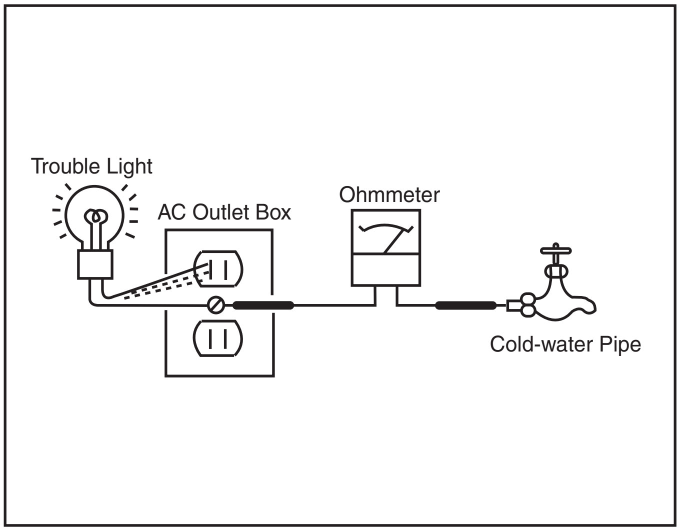
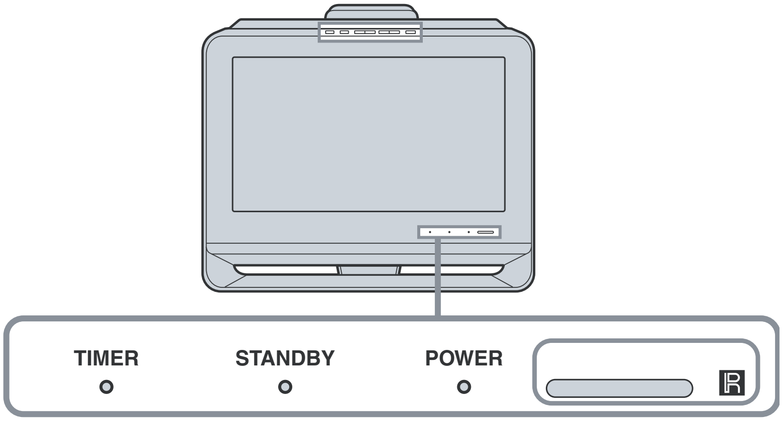


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION

IMPORTANT:
The unit in this manual DOES NOT contain a self-diagnostic function. If an error occurs, the TV will not stay on. It is our recommendation that if a repair is required for this set, the technician should bring both the A Board and the G Board to the customer location.

Control Buttons

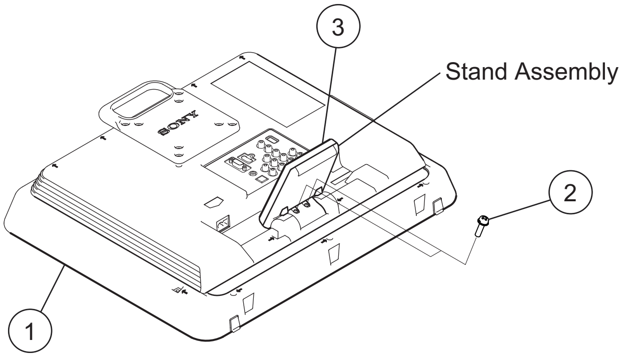


Description of LED Indictors
The unit in this manual DOES NOT contain a self-diagnostic function.

SECTION 1: DISASSEMBLY

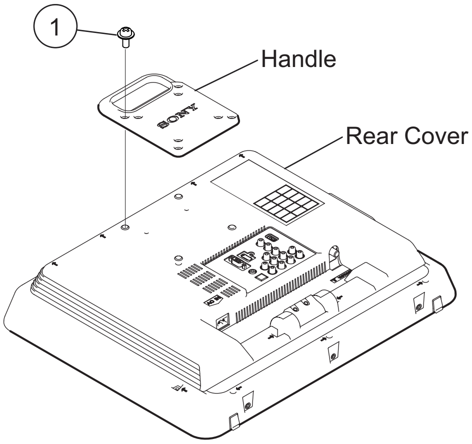
1-1. STAND REMOVAL

① Place the TV set face down onto the soft cloth
② Remove 2 screws, +PSW M4X16
③ Hold both sides of the stand firmly, and pull out the stand from hinge housing


3
Stand Assembly
2
1

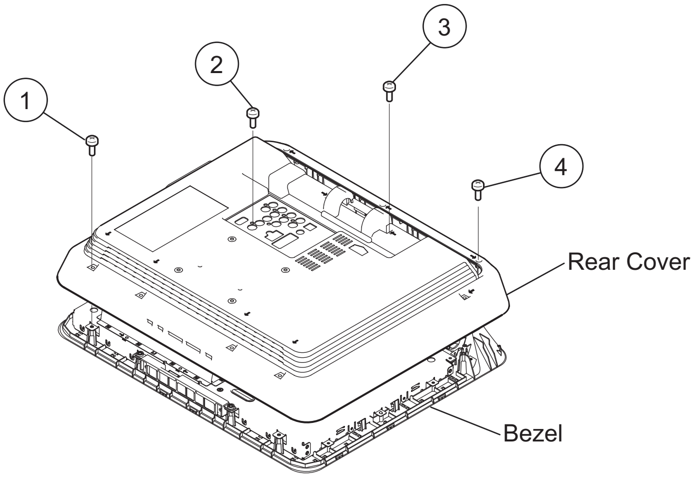
1-2. HANDLE REMOVAL

① Remove 4 screws Handle and Rear Cover, +PSW M4X12


1
Handle
Rear Cover

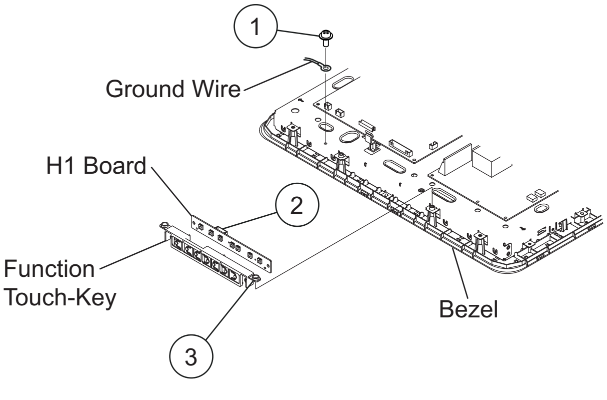
1-3. REAR COVER REMOVAL

① Remove 6 screws, +BVTP 4X25
② Remove 3 screws from Terminal positions, +BVTP 3X10
③ Remove 2 screws from both sides of Hinge positions, +BVTP 4X12
④ Remove 3 screws from bottom of Rear Cover, +BVTP 3X10


3
2
1
4
Rear Cover
Bezel

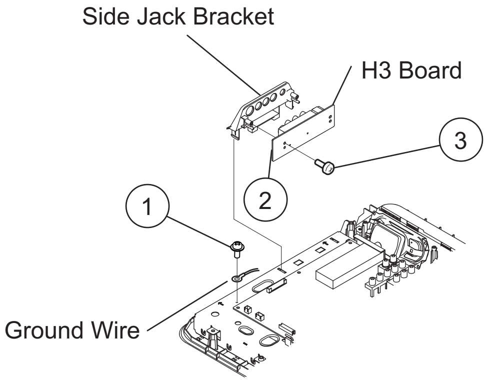
1-4. FUNCTION KEY REMOVAL

① Remove 1 screw and release ground wire, +PSW M3X6
② Disconnect one connector from H1 Board
③ Release hooks


1
Ground Wire
H1 Board
2
Function Touch-Key
Bezel
3

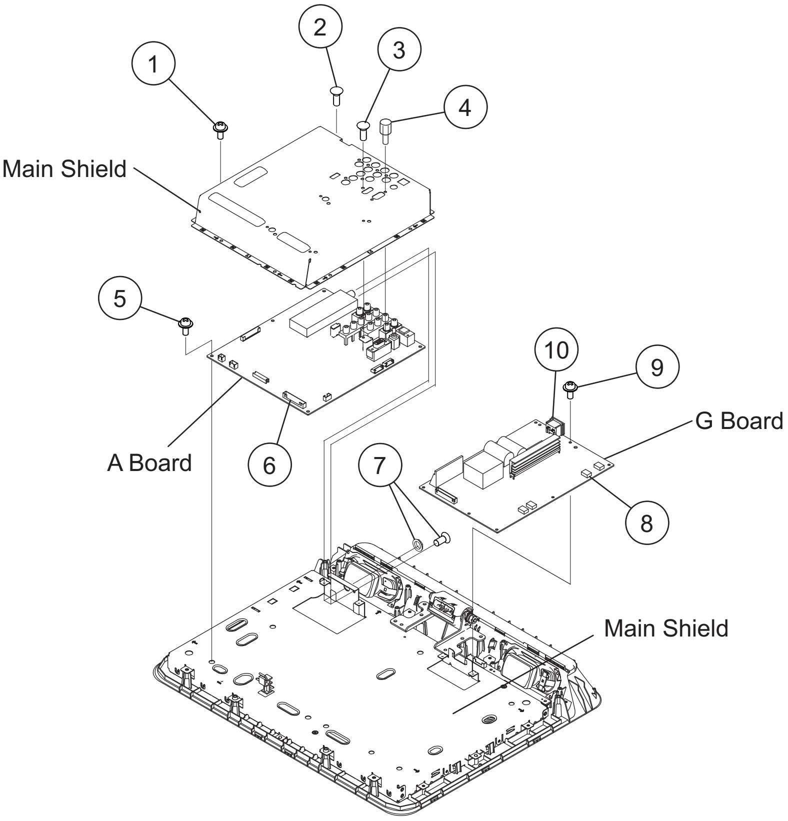
☛ 1-5. H3 BOARD REMOVAL

① Remove 1 screw and release ground wire, +PSW M3X6
② Disconnect one connector from H3 Board
③ Remove 2 screws, +BVTP 3X10


Side Jack Bracket
H3 Board
3
1
2
Ground Wire

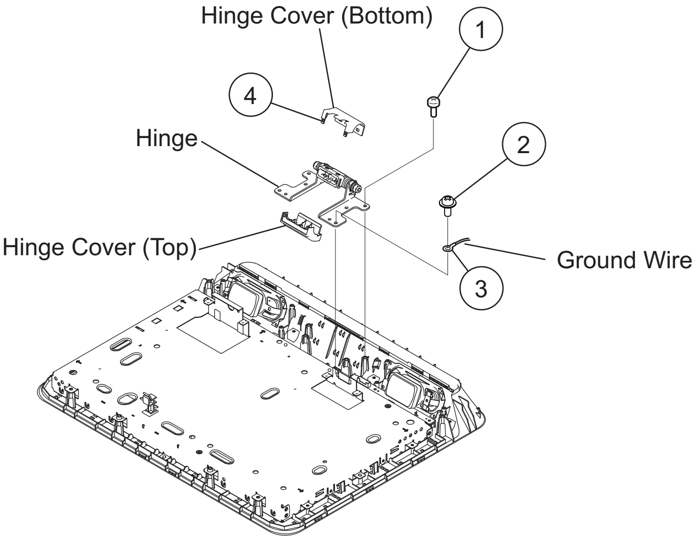
1-6. A BOARD AND G BOARD REMOVAL

① Remove 8 screws and release ground wire, +PSW M3X6
② Remove 4 screws from bottom of Main Shield, +FH 4X5
③ Remove 1 screw, +FH 3X4
④ Remove 2 screws, UNC (HEX)
⑤ Remove 5 screws, +PSW M3X6
⑥ Disconnect 8 connectors
⑦ Remove 1 Nut and 1 screw (+FH3X4) from Tuner
⑧ Disconnect 5 connectors
⑨ Remove 6 screws, +PSW M3X6
⑩ Slide out AC inlet with G Board from Main Bracket


2
3
1
4
Main Shield
5
10
9
G Board
A Board
6
7
8
Main Shield

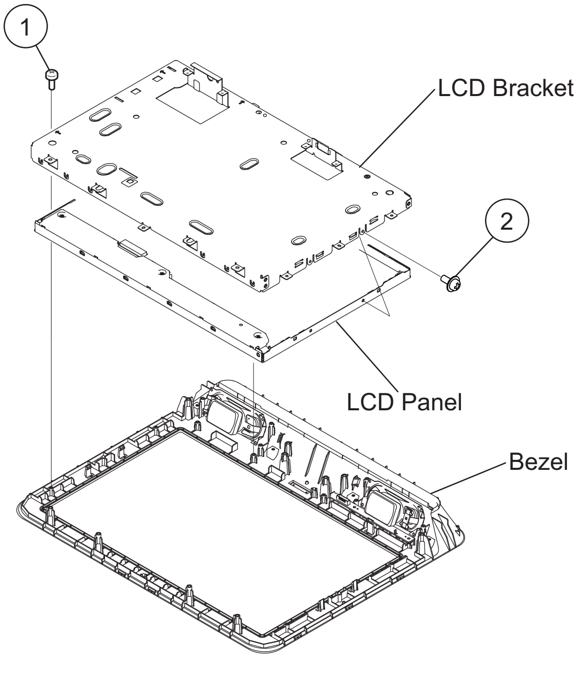
1-7. HINGE REMOVAL

① Remove 2 screws, +BVTP 4X21
② Remove 2 screws, +PSW M4X16
③ Release Ground Wire
④ Unhook Bottom and Top Hinge Covers


Hinge Cover (Bottom)
1
4
Hinge
2
Hinge Cover (Top)
Ground Wire
3

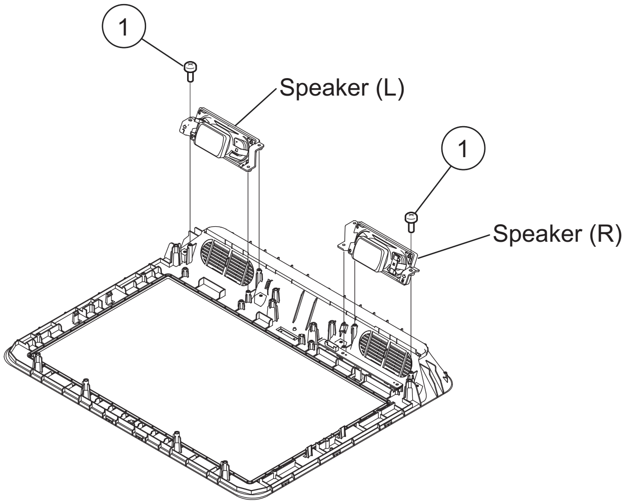
1-8. LCD PANEL AND MAIN BRACKET REMOVAL

① Remove 7 screws, +BVTP 3X10
② Remove 4 screws, +PSW M3X6


1
LCD Bracket
2
LCD Panel
Bezel

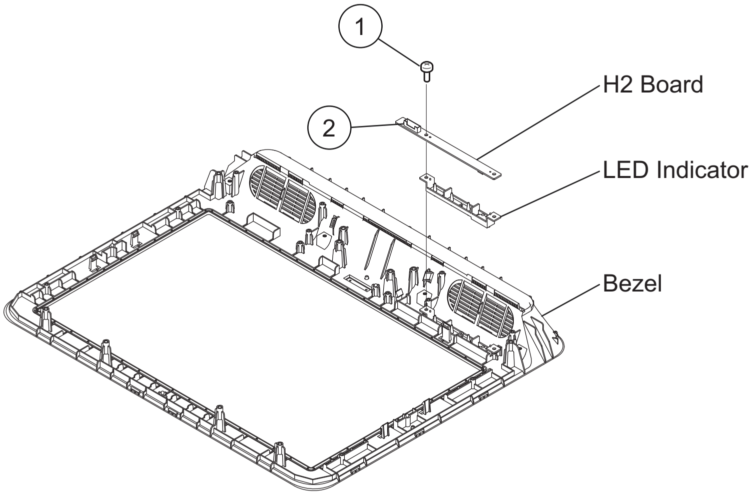
1-9. SPEAKERS REMOVAL

① Remove 6 screws from Speakers, +BVTP 3X10


1
Speaker (L)
1
Speaker (R)

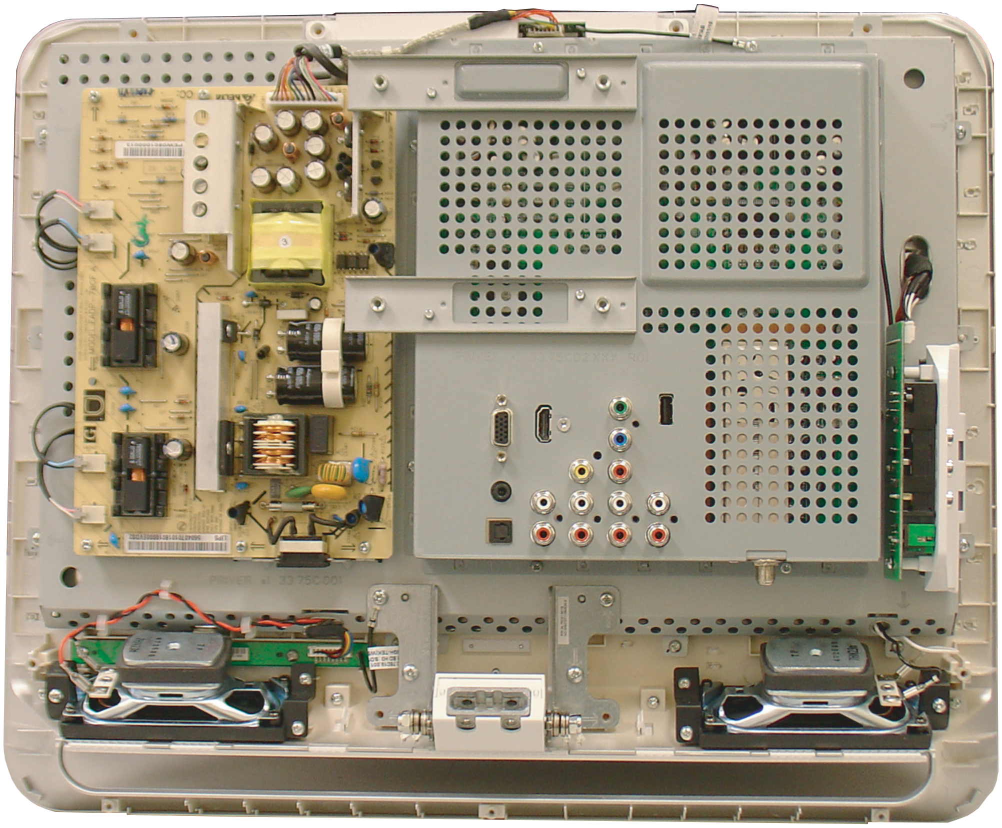
☛1-10. H2 BOARD AND LED LENS REMOVAL

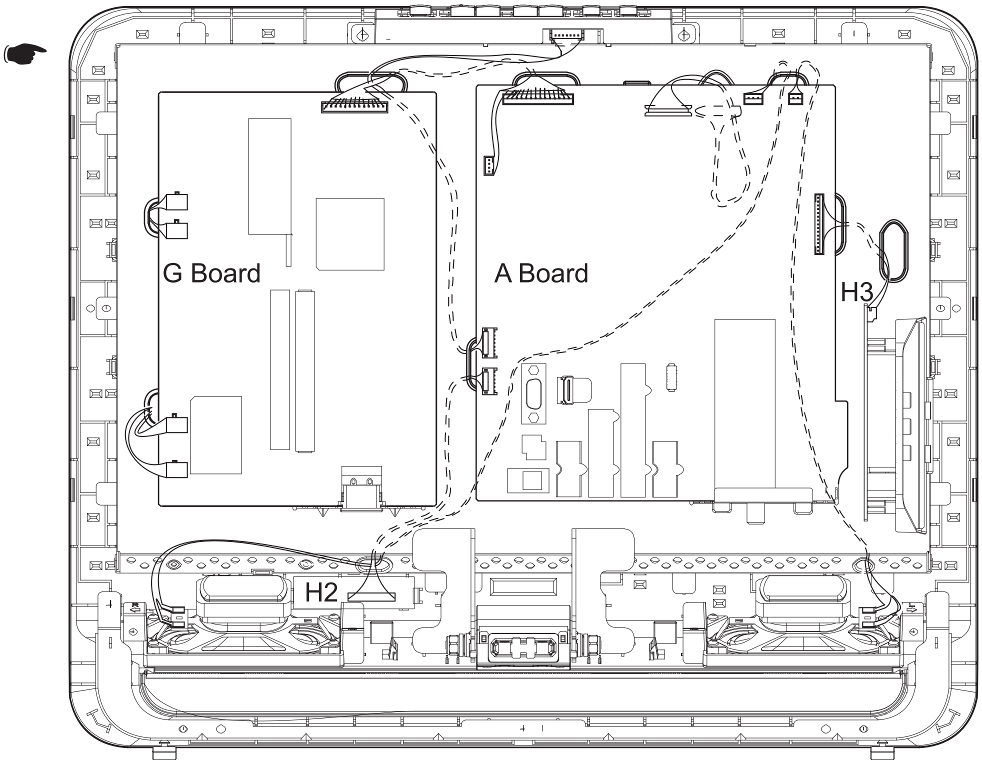
① Remove 2 screws, +BVTP 3X10
② Disconnect 1 connector


1
H2 Board
2
LED Indicator
Bezel

WIRE DRESSING

OVERALL VIEW




G Board
A Board
H3
H2

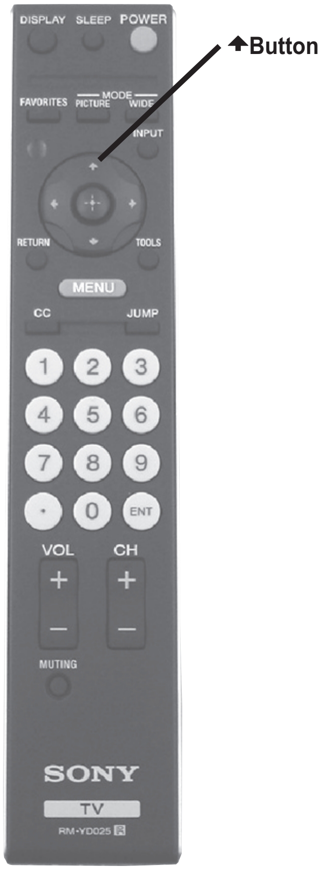
SECTION 2: SERVICE ADJUSTMENTS

2-1. RESETTING TO FACTORY DEFAULTS AFTER BOARD REPLACEMENT

Traditional Service Mode is not available in this chassis. The only option for service technicians is to reset all of the settings to the Factory Default from the Self Diagnostic screen.

CAUTION: Resetting the TV to the Factory Defaults will *over-write all customer settings* including Parental Lock setting. Before performing this reset, contact the customer to determine what adjustments they have made.

1. Turn on the TV.
2. While holding down the ⬆ button on the remote control, on the TV press and hold the **MENU** button until “reset” displays at the bottom left corner of the screen.
   The TV turns itself off, then turns back on again.
   The Initial Setup screen displays.
3. Use the Initial Setup screen options to reset the TV to the factory settings.

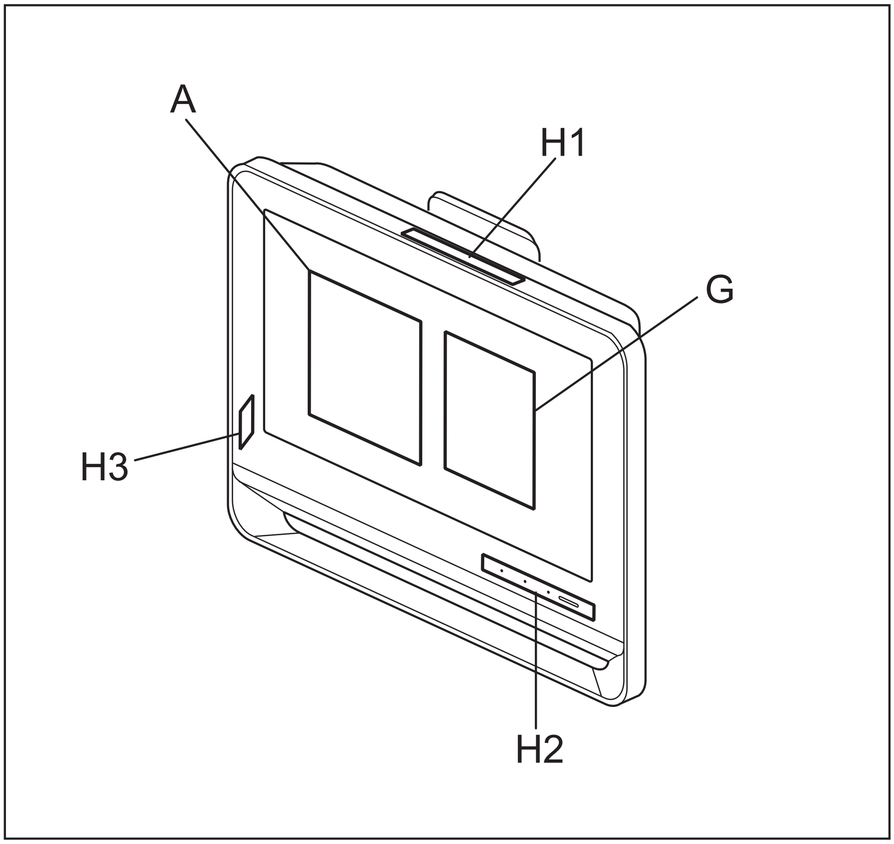

⬆Button
DISPLAY
SLEEP
POWER
FAVORITES
MODE
PICTURE
WIDE
INPUT
RETURN
TOOLS
MENU
CC
JUMP
1
2
3
4
5
6
7
8
9
•
0
ENT
VOL
CH
+
—
MUTING
SONY
TV
RM-YD025

RM-YD025

SECTION 3: DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION

☛



3-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. kΩ=1000Ω, MΩ=1000kΩ

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $^{1}/_{4}$ W

$^{1}/_{4}$ W in resistance, $^{1}/_{10}$ W and $^{1}/_{16}$ W in chip resistance.

▭ : nonflammable resistor

▭ : fusible resistor

△ : internal component

▭ : panel designation and adjustment for repair

⊥ : earth ground

⏚ : earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a 10MΩ digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

▬ : B+line.

– – : B-line. (Actual measured value may be different).

⇨ : signal path. (RF)

Circled numbers are waveform references.

The components identified by shading and ⚠ symbol are critical for safety. Replace only with part number specified.

The symbol ▭ indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole ▭ indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

NOTE: The components identified by a red outline and a 🔒 mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced.
See Appendix A: Encryption Key Components in the back of this manual.

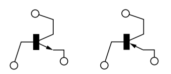
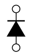
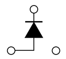
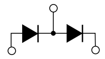
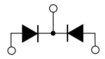
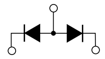
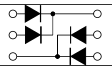
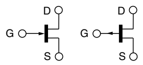
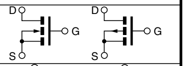
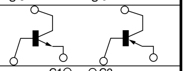
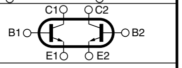
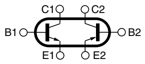
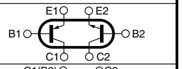
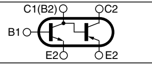
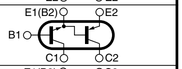
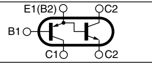
REFERENCE INFORMATION

RESISTOR
: RN METAL FILM
: RC SOLID
: FPRD NONFLAMMABLE CARBON
: FUSE NONFLAMMABLE FUSIBLE
: RW NONFLAMMABLE WIREWOUND
: RS NONFLAMMABLE METAL OXIDE
: RB NONFLAMMABLE CEMENT
: ※ ADJUSTMENT RESISTOR

COIL
: LF-8L MICRO INDUCTOR

CAPACITOR
: TA TANTALUM
: PS STYROL
: PP POLYPROPYLENE
: PT MYLAR
: MPS METALIZED POLYESTER
: MPP METALIZED POLYPROPYLENE
: ALB BIPOLAR
: ALT HIGH TEMPERATURE
: ALR HIGH RIPPLE

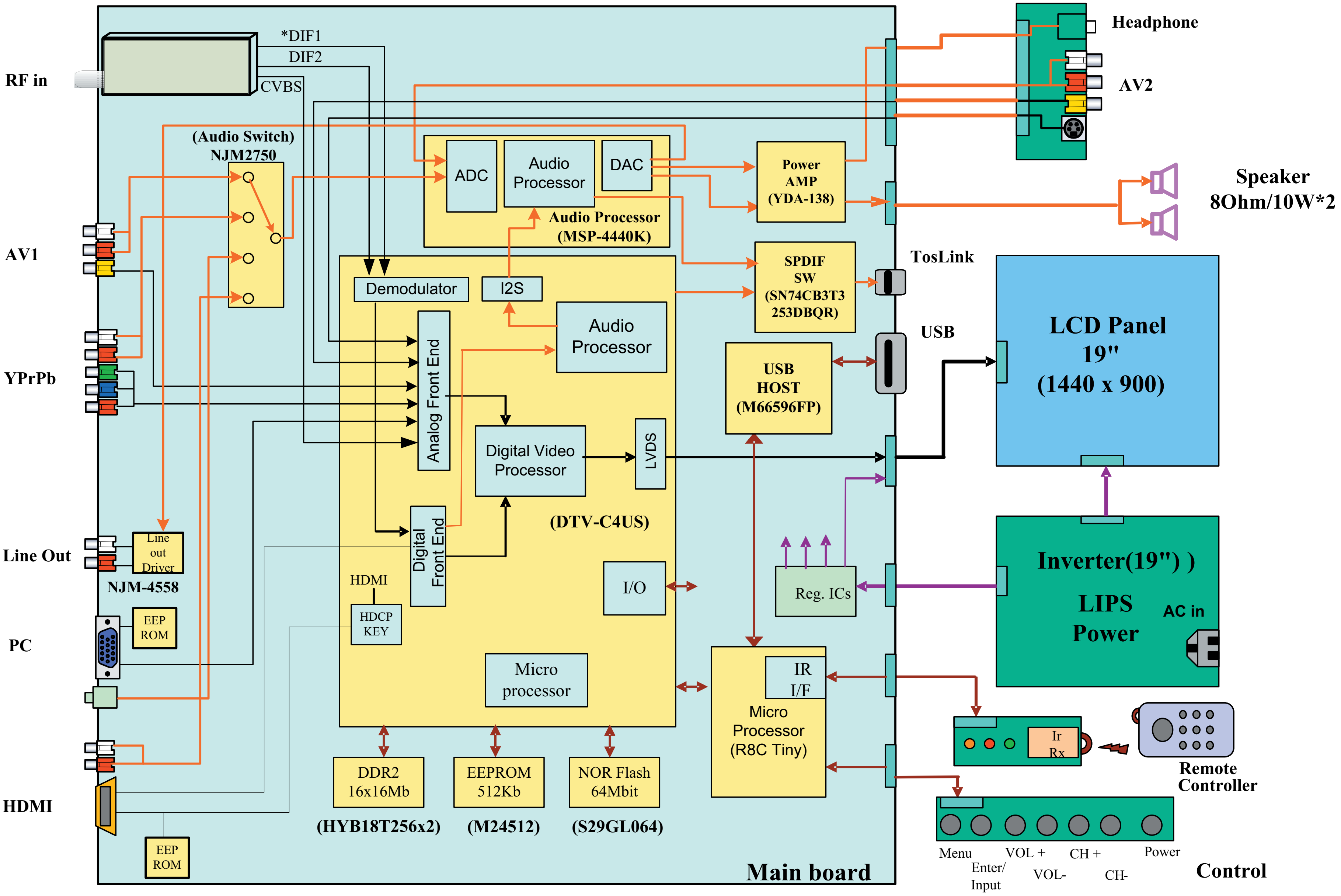
Terminal name of semiconductors in silk screen printed circuit (✻)

	Device	Printed symbol	Terminal name	Circuit
1	Transistor	┳	Collector Base ┳ Emitter	
2	Transistor	━	Collector ━ Base Emitter	
3	Diode	⊓	Cathode — Anode	
4	Diode	┳	Cathode Anode ┳ (NC)	
5	Diode	━	Cathode ━ Anode (NC)	
6	Diode	┳	Common Anode ┳ Cathode	
7	Diode	━	Common ━ Anode Cathode	
8	Diode	┳	Common Anode ┳ Anode	
9	Diode	━	Common ━ Anode Anode	
10	Diode	┳	Common Cathode ┳ Cathode	
11	Diode	━	Common ━ Cathode Cathode	
12	Diode	┃	Anode ┃ Cathode Anode ┃ Anode Cathode ┃ Anode	
13	Transistor (FET)	┃	Drain ┃ Source ┃ Gate	
14	Transistor (FET)	┣	Drain ┣ Source ┃ Gate	
15	Transistor (FET)	┃	▯ ┃ ☐ Source ☐ Drain ☐ Gate	
16	Transistor	┃	▯ ┃ ☐ Emitter ☐ Collector ☐ Base	
17	Transistor	╪	C2 B1 E1 ━ E2 B2 C1	
18	Transistor	╪	C1 B2 E2 ━ E1 B1 C2	
19	Transistor	━	C1 B2 E2 ━ E1 B1 C2	
20	Transistor	━	C1 B2 E2 ━ E1 B1 C2	
21	Transistor	━	E2 B1 E1 ━ C2 C1(B2)	
22	Transistor	━	(B2) B1 E1 E2 ━ C1 C2	
23	Transistor	━	(B2) E2 E1 B1 ━ C2 C1	
–	Discrete semiconductor			

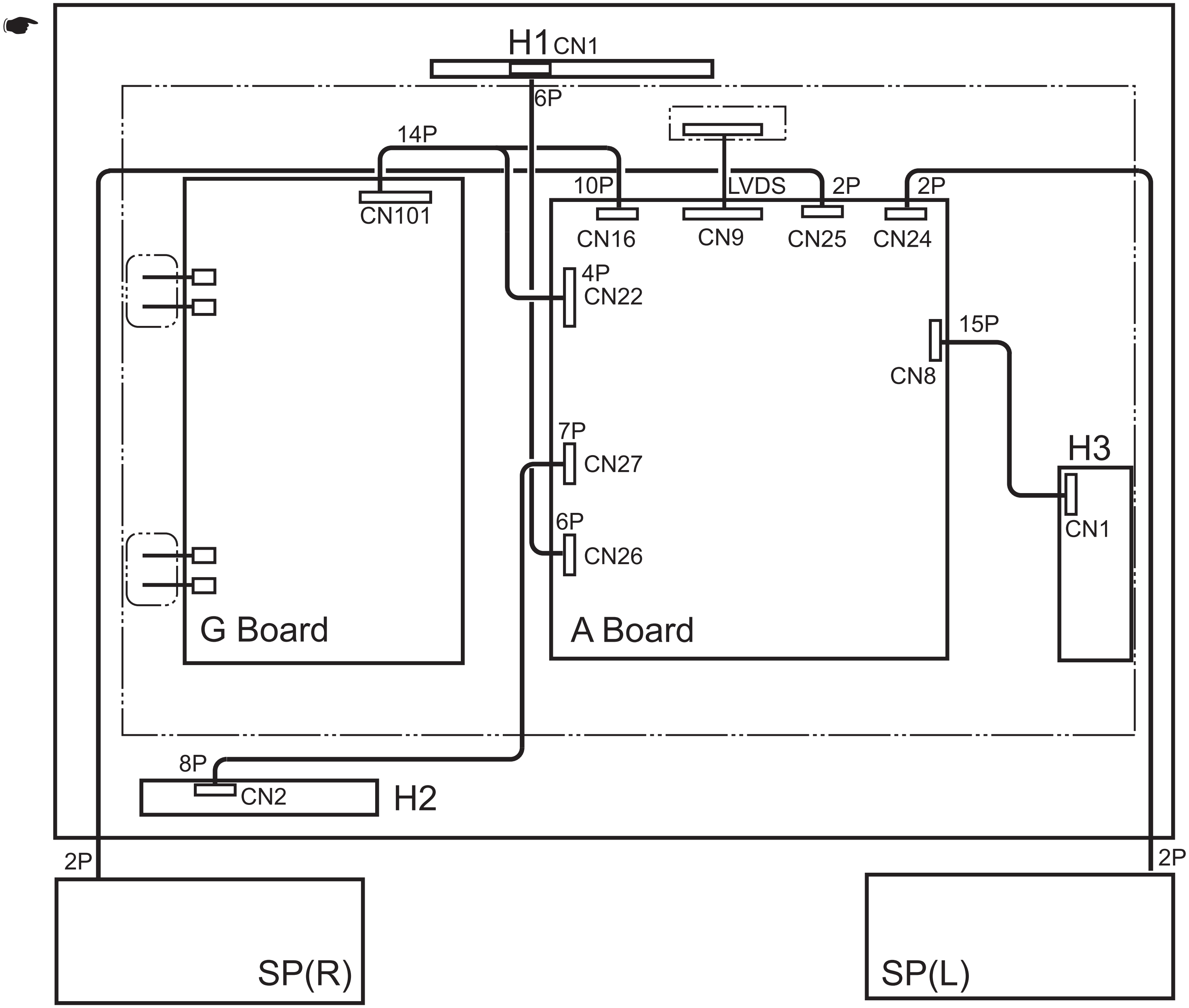
(Chip semiconductors that are not actually used are included.)

Ver.1.6

3-3. BLOCK DIAGRAM

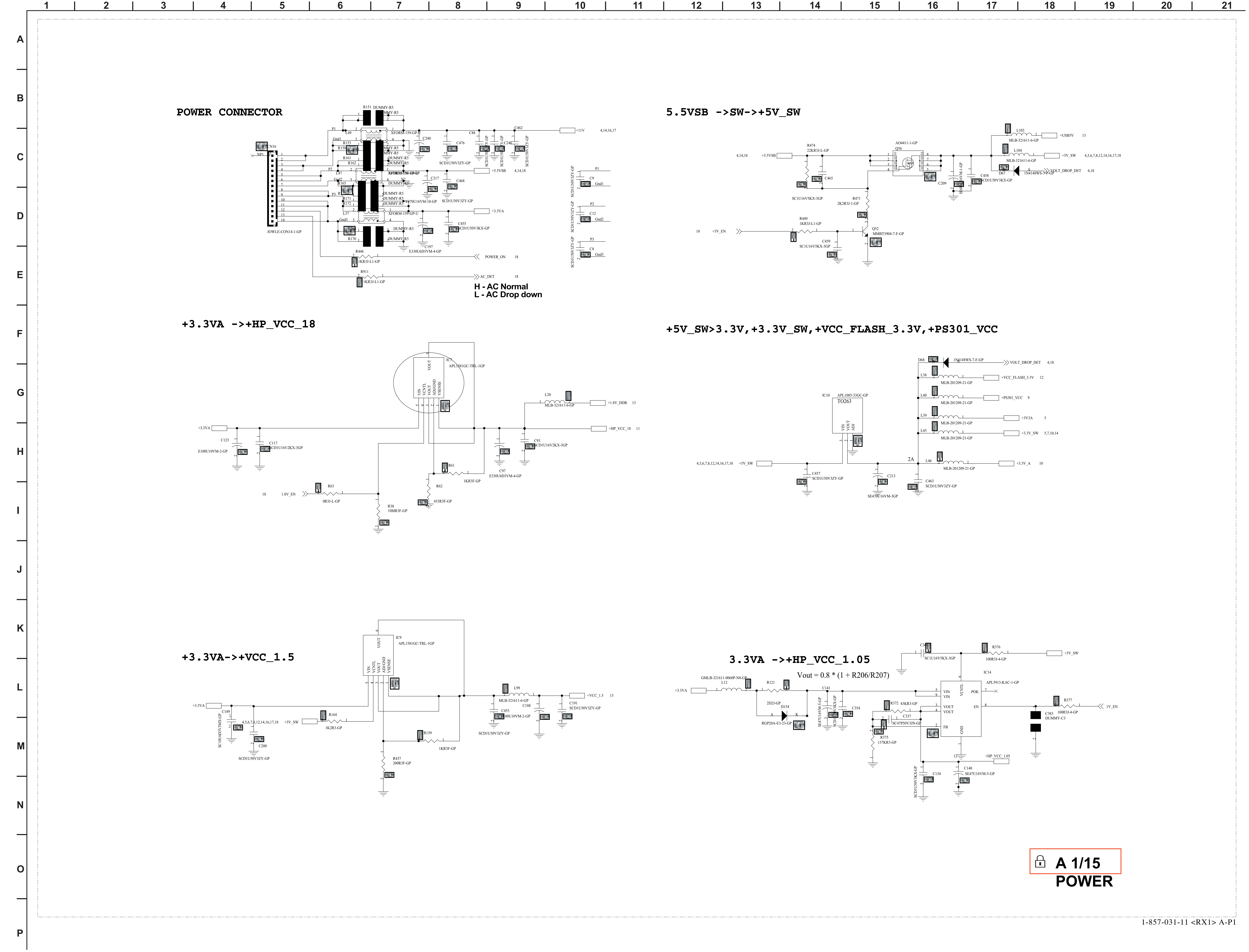

RF in
*DIF1
DIF2
CVBS
(Audio Switch)
NJM2750
AV1
YPrPb
Line Out
Line out Driver
NJM-4558
PC
EEP ROM
HDMI
EEP ROM
ADC
Audio Processor
DAC
Audio Processor
(MSP-4440K)
Demodulator
I2S
Audio Processor
Analog Front End
Digital Video Processor
LVDS
Digital Front End
(DTV-C4US)
HDMI
HDCP KEY
I/O
Micro processor
DDR2
16x16Mb
(HYB18T256x2)
EEPROM
512Kb
(M24512)
NOR Flash
64Mbit
(S29GL064)
Power AMP
(YDA-138)
SPDIF SW
(SN74CB3T3 253DBQR)
USB HOST
(M66596FP)
Reg. ICs
IR I/F
Micro Processor
(R8C Tiny)
Main board
Headphone
AV2
Speaker
8Ohm/10W*2
TosLink
USB
LCD Panel
19"
(1440 x 900)
Inverter(19"))
LIPS
Power
AC in
Ir Rx
Remote Controller
Menu
Enter/ Input
VOL +
VOL-
CH +
CH-
Power
Control

3-4. CONNECTOR DIAGRAM

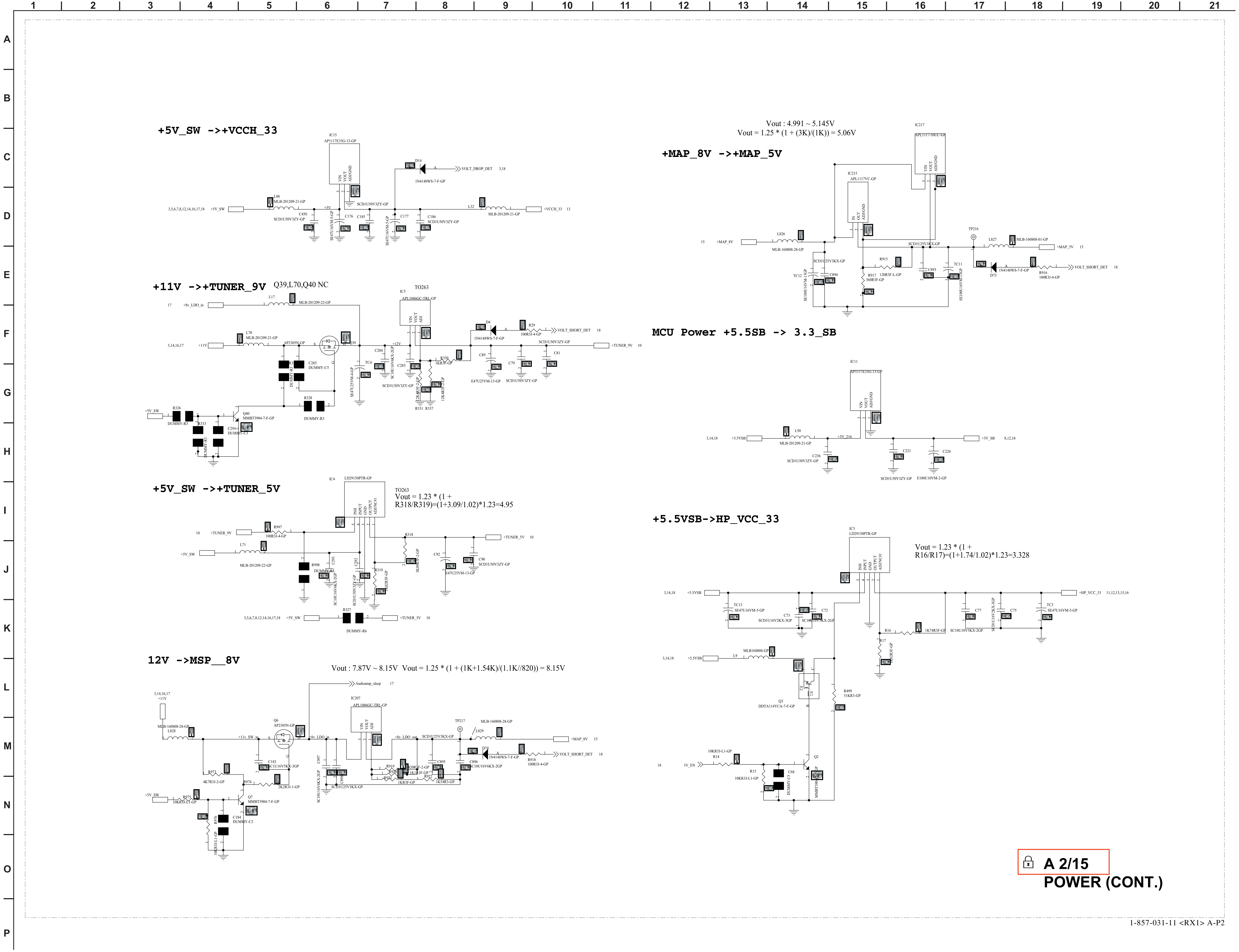

H1
CN1
6P
14P
10P
LVDS
2P
2P
CN101
CN16
CN9
CN25
CN24
4P
CN22
15P
CN8
7P
CN27
H3
6P
CN26
CN1
G Board
A Board
8P
CN2
H2
2P
2P
SP(R)
SP(L)

3-5. SCHEMATICS AND SUPPORTING INFORMATION

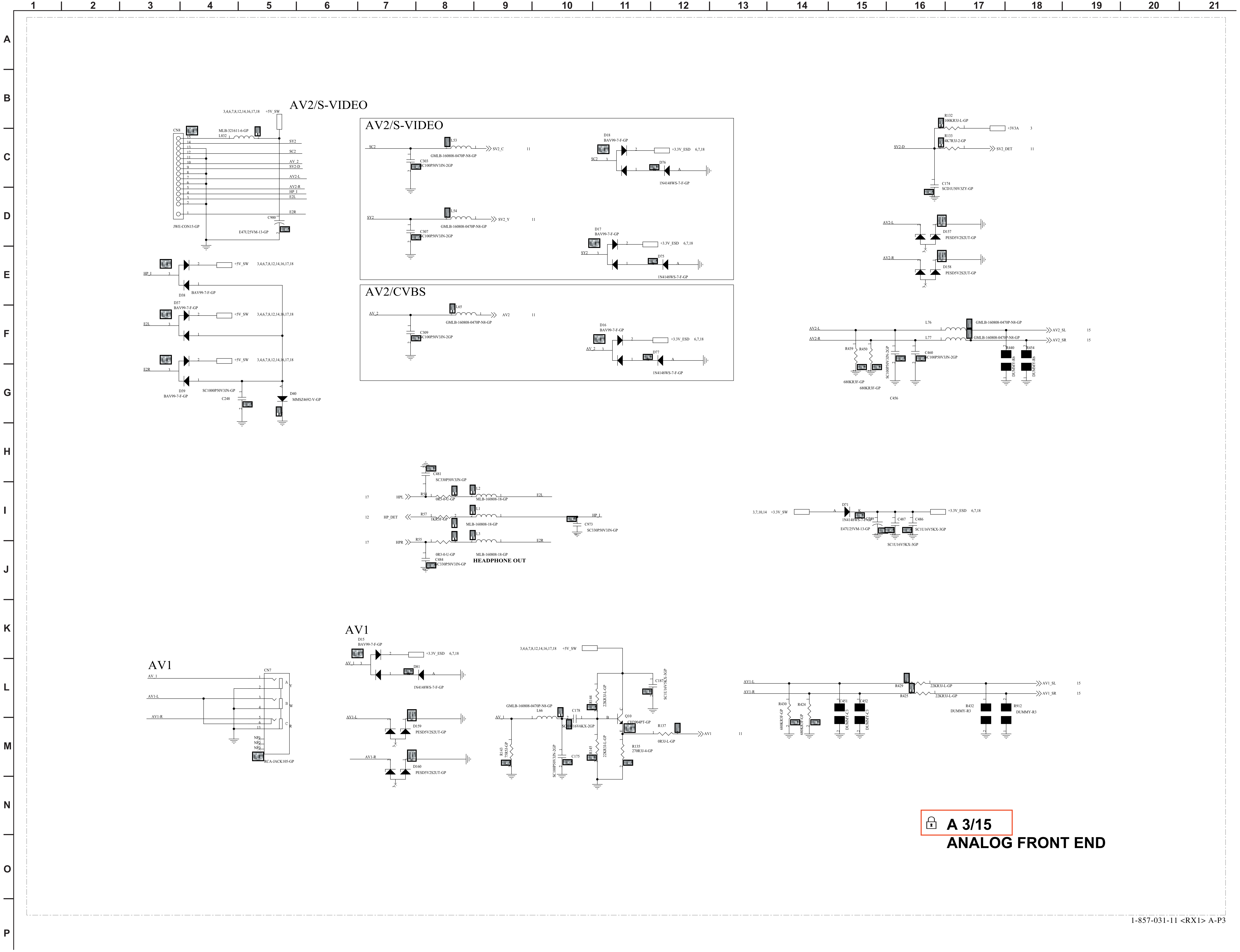
A BOARD SCHEMATIC DIAGRAM (1 OF 15)


POWER CONNECTOR
5.5VSB ->SW->+5V_SW
+3.3VA ->+HP_VCC_18
+5V_SW>3.3V,+3.3V_SW,+VCC_FLASH_3.3V,+PS301_VCC
+3.3VA->+VCC_1.5
3.3VA ->+HP_VCC_1.05
Vout = 0.8 * (1 + R206/R207)
H - AC Normal
L - AC Drop down
POWER_ON
AC_DET
+5V_EN
VOLT_DROP_DET
+VCC_FLASH_3.3V
+PS301_VCC
+3V3A
+3.3V_SW
+3.3V_A
+1.8V_DDR
+HP_VCC_18
1.8V_EN
+VCC_1.5
+HP_VCC_1.05
1V_EN
A 1/15
POWER
1-857-031-11 <RX1> A-P1

A BOARD SCHEMATIC DIAGRAM (2 OF 15)


+5V_SW ->+VCCH_33
+11V ->+TUNER_9V
Q39,L70,Q40 NC
+5V_SW ->+TUNER_5V
TO263
Vout = 1.23 * (1 +
R318/R319)=(1+3.09/1.02)*1.23=4.95
12V ->MSP__8V
Vout : 7.87V ~ 8.15V Vout = 1.25 * (1 + (1K+1.54K)/(1.1K//820)) = 8.15V
Vout : 4.991 ~ 5.145V
Vout = 1.25 * (1 + (3K)/(1K)) = 5.06V
+MAP_8V ->+MAP_5V
MCU Power +5.5SB -> 3.3_SB
+5.5VSB->HP_VCC_33
Vout = 1.23 * (1 +
R16/R17)=(1+1.74/1.02)*1.23=3.328
VOLT_DROP_DET
VOLT_SHORT_DET
+VCCH_33
+TUNER_9V
+TUNER_5V
+MAP_8V
+MAP_5V
+3V_SB
+HP_VCC_33
A 2/15
POWER (CONT.)
1-857-031-11 <RX1> A-P2

A BOARD SCHEMATIC DIAGRAM (3 OF 15)

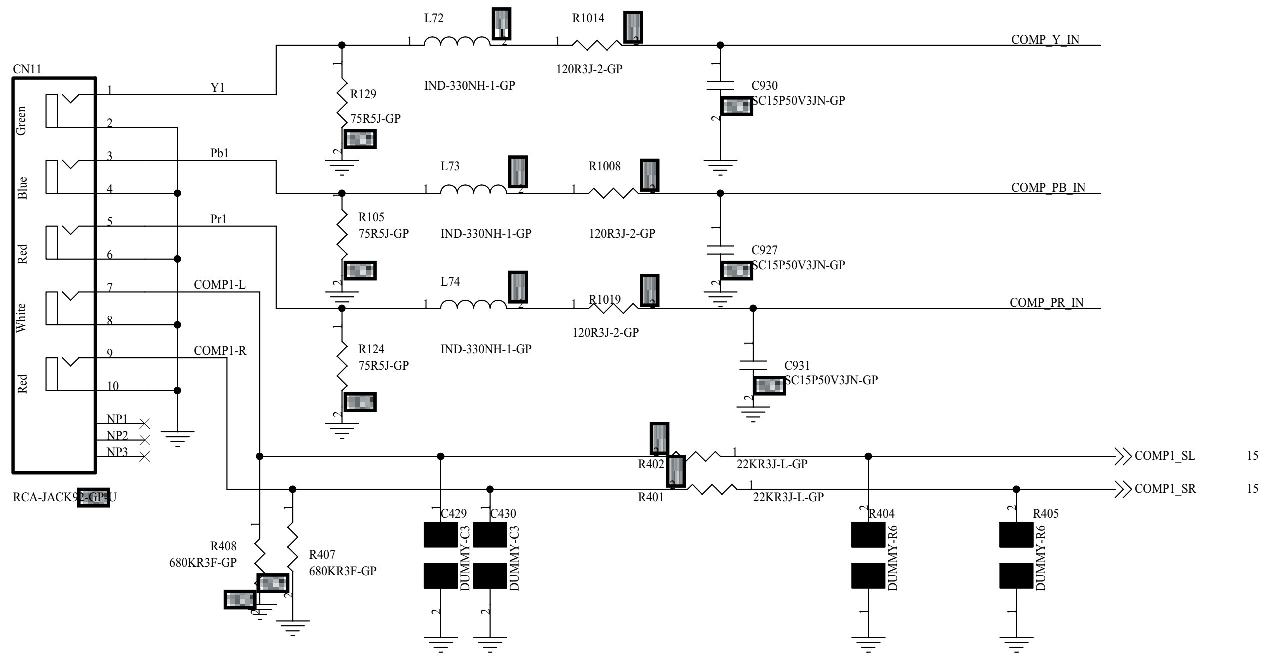

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
A B C D E F G H I J K L M N O P
AV2/S-VIDEO
AV2/S-VIDEO
AV2/CVBS
HEADPHONE OUT
AV1
AV1
CN8
JWE-CON15-GP
CN7
RCA-JACK105-GP
Q10
A 3/15
ANALOG FRONT END
1-857-031-11 <RX1> A-P3

A BOARD SCHEMATIC DIAGRAM (4 OF 15)

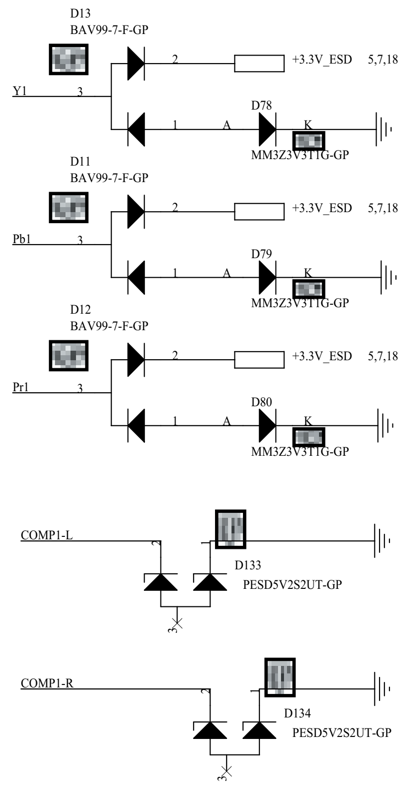
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

A B C D E F G H I J K L M N O P

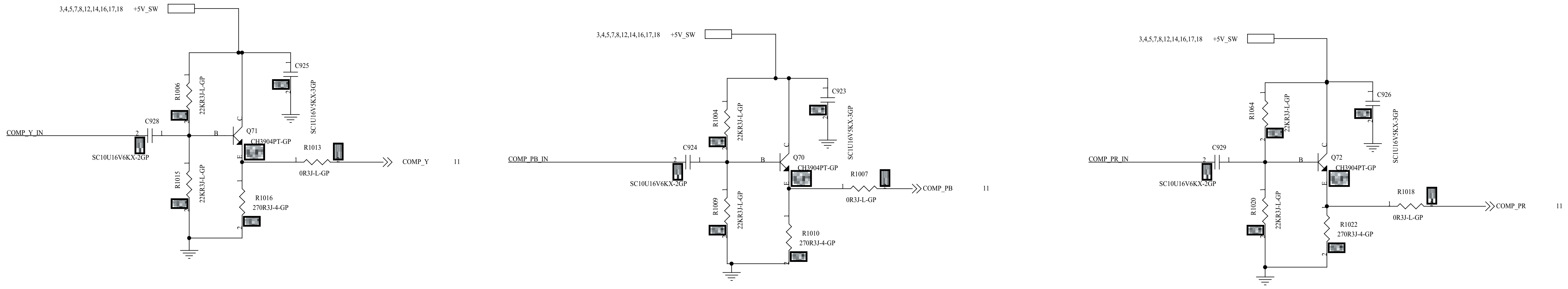
COMPONENT I/P


CN11
Green
Blue
Red
White
Red
1
2
3
4
5
6
7
8
9
10
NP1
NP2
NP3
RCA-JACK92-GP-U
Y1
Pb1
Pr1
COMP1-L
COMP1-R
L72
IND-330NH-1-GP
R1014
120R3J-2-GP
COMP_Y_IN
R129
75R5J-GP
C930
SC15P50V3JN-GP
L73
IND-330NH-1-GP
R1008
120R3J-2-GP
COMP_PB_IN
R105
75R5J-GP
C927
SC15P50V3JN-GP
L74
IND-330NH-1-GP
R1019
120R3J-2-GP
COMP_PR_IN
R124
75R5J-GP
C931
SC15P50V3JN-GP
R402
22KR3J-L-GP
COMP1_SL
15
R401
22KR3J-L-GP
COMP1_SR
15
R408
680KR3F-GP
R407
680KR3F-GP
C429
DUMMY-C3
C430
DUMMY-C3
R404
DUMMY-R6
R405
DUMMY-R6

Y/Pb/Pr + R/L ESD protection


D13
BAV99-7-F-GP
Y1
+3.3V_ESD
5,7,18
D78
MM3Z3V3T1G-GP
D11
BAV99-7-F-GP
Pb1
+3.3V_ESD
5,7,18
D79
MM3Z3V3T1G-GP
D12
BAV99-7-F-GP
Pr1
+3.3V_ESD
5,7,18
D80
MM3Z3V3T1G-GP
A
K
COMP1-L
D133
PESD5V2S2UT-GP
COMP1-R
D134
PESD5V2S2UT-GP

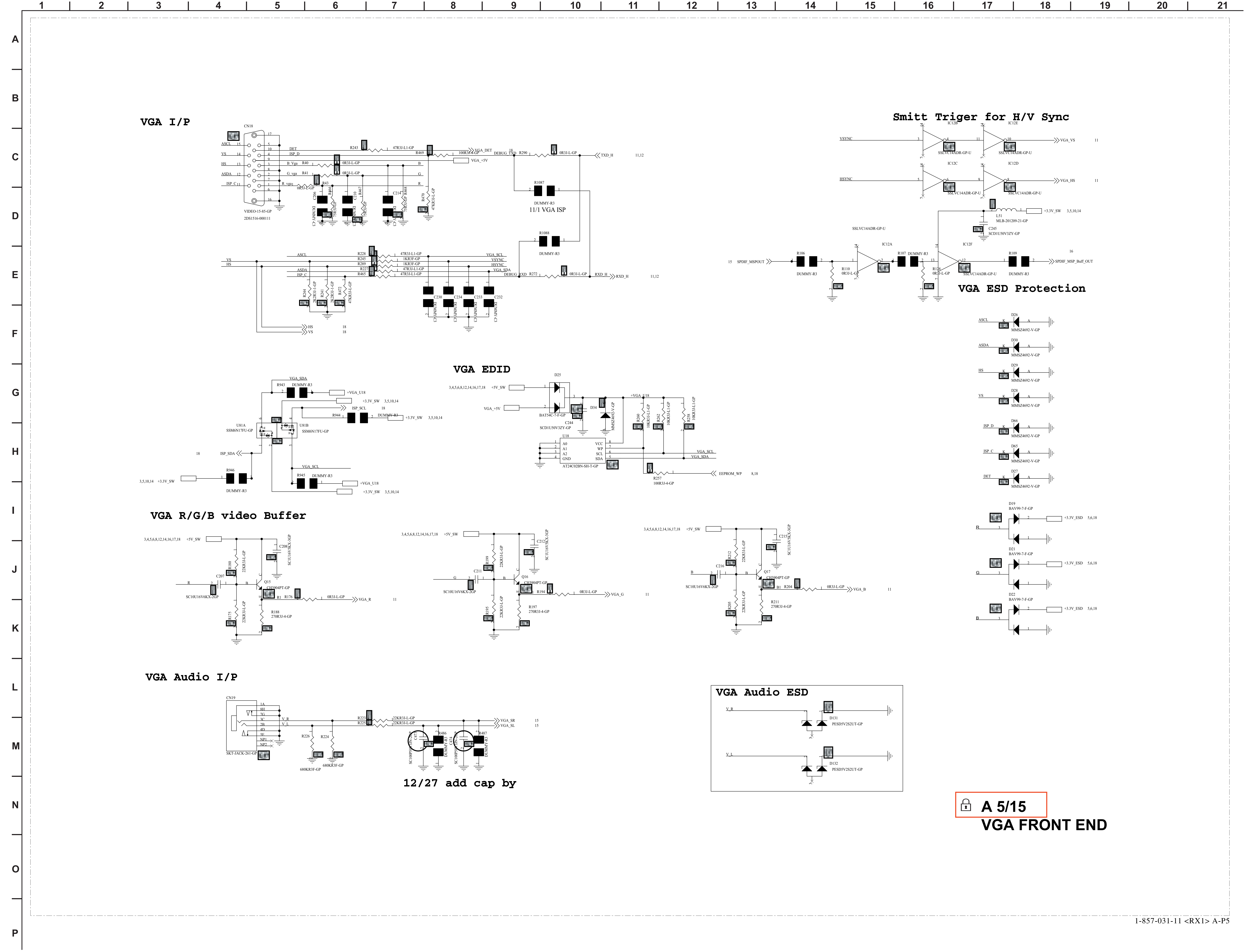
Y/Pb/Pr video buffer


3,4,5,7,8,12,14,16,17,18
+5V_SW
COMP_Y_IN
C928
SC10U16V6KX-2GP
R1006
22KR3J-L-GP
R1015
22KR3J-L-GP
C925
SC1U16V5KX-3GP
Q71
CH3904PT-GP
B
C
E
R1013
0R3J-L-GP
COMP_Y
11
R1016
270R3J-4-GP
3,4,5,7,8,12,14,16,17,18
+5V_SW
COMP_PB_IN
C924
SC10U16V6KX-2GP
R1004
22KR3J-L-GP
R1009
22KR3J-L-GP
C923
SC1U16V5KX-3GP
Q70
CH3904PT-GP
R1007
0R3J-L-GP
COMP_PB
11
R1010
270R3J-4-GP
3,4,5,7,8,12,14,16,17,18
+5V_SW
COMP_PR_IN
C929
SC10U16V6KX-2GP
R1064
22KR3J-L-GP
R1020
22KR3J-L-GP
C926
SC1U16V5KX-3GP
Q72
CH3904PT-GP
R1018
0R3J-L-GP
COMP_PR
11
R1022
270R3J-4-GP

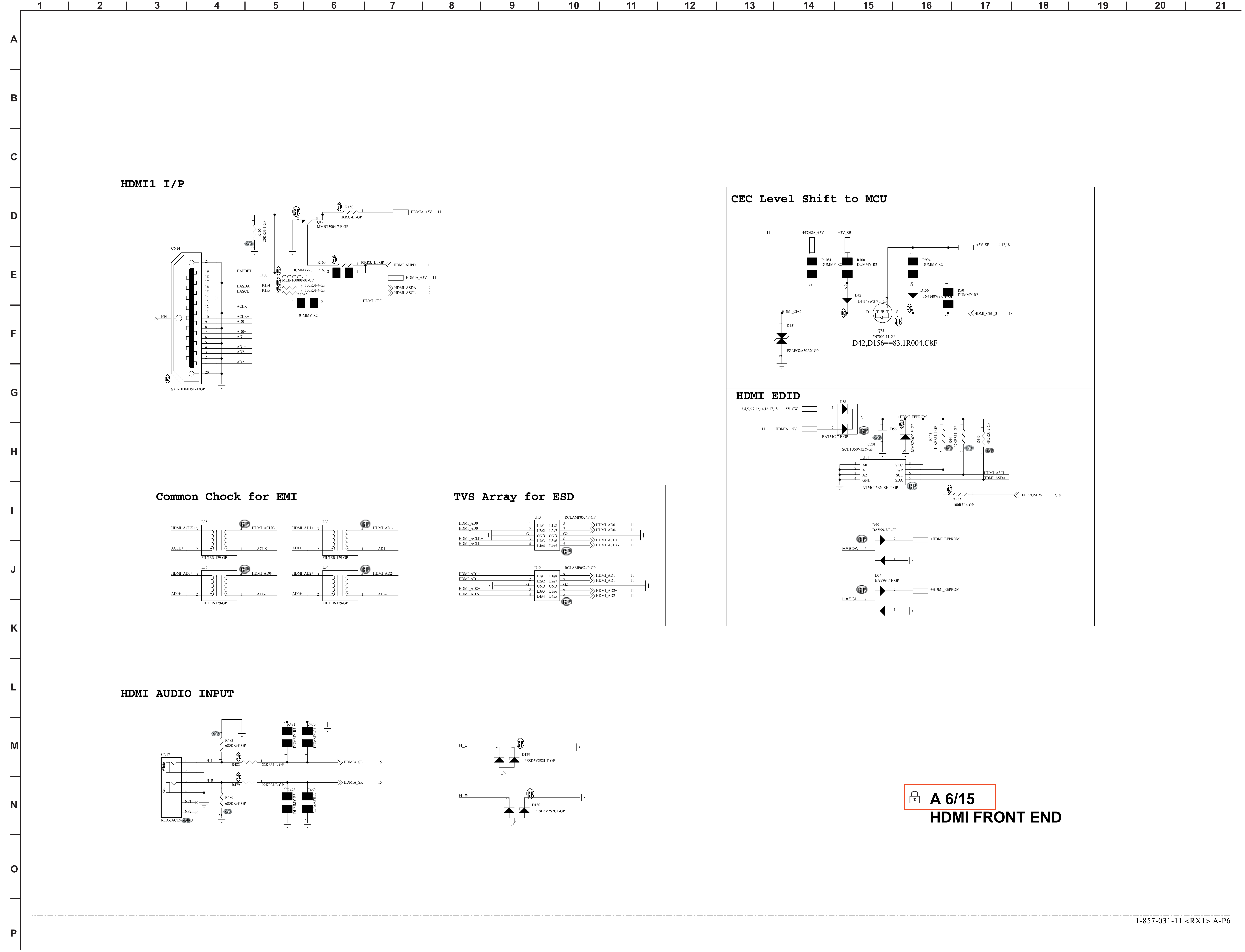
A 4/15
ANALOG FRONT END
Ypbpr

1-857-031-11 <RX1> A-P1

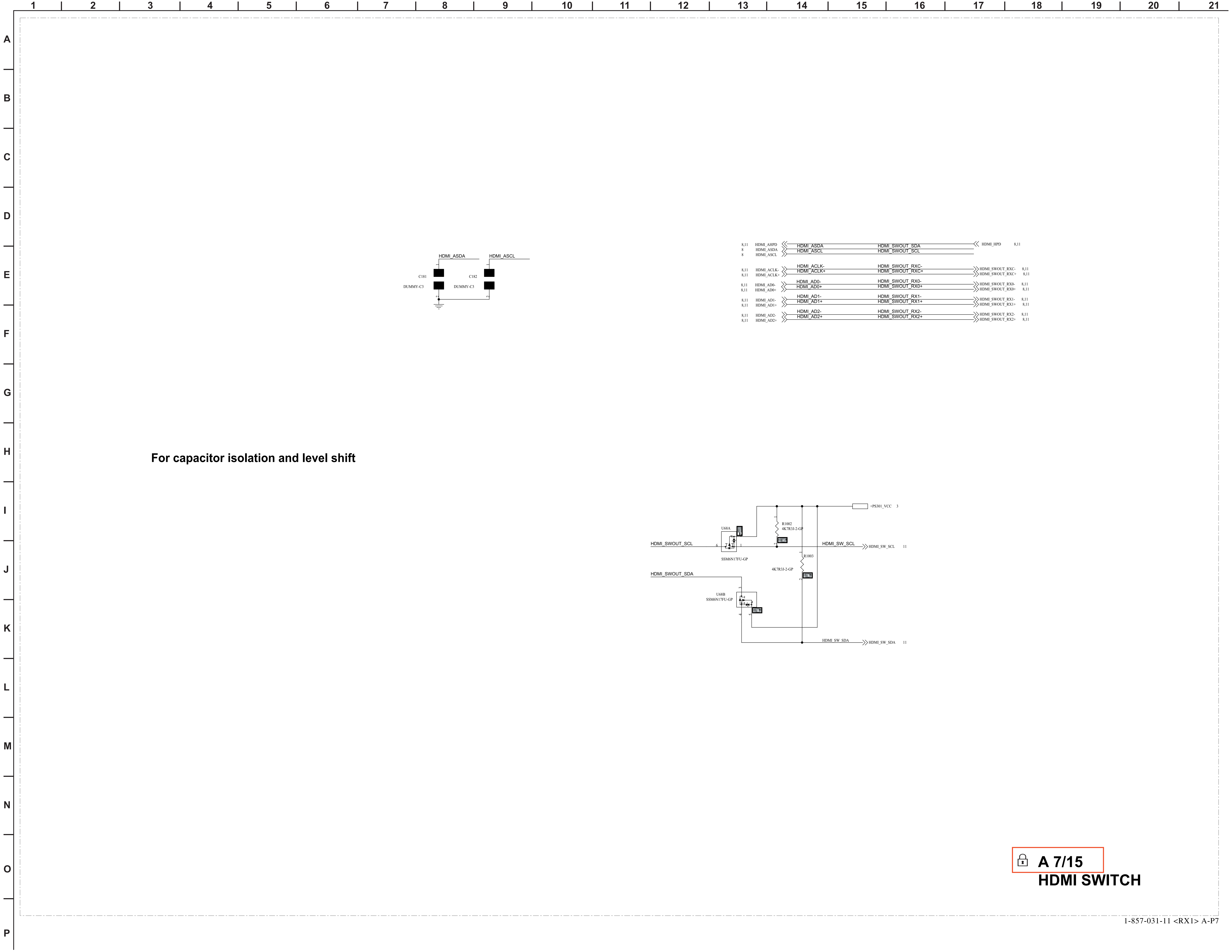
A BOARD SCHEMATIC DIAGRAM (5 OF 15)


VGA I/P
CN18
VIDEO-15-85-GP
2DS1516-000111
11/1 VGA ISP
Smitt Triger for H/V Sync
VSYNC
HSYNC
VGA_VS
VGA_HS
SPDIF_MSPOUT
SPDIF_MSP_Buff_OUT
VGA ESD Protection
MMSZ4692-V-GP
BAV99-7-F-GP
VGA EDID
AT24C02BN-SH-T-GP
EEPROM_WP
VGA R/G/B video Buffer
VGA_R
VGA_G
VGA_B
VGA Audio I/P
CN19
VGA_SR
VGA_SL
12/27 add cap by
VGA Audio ESD
PESD5V2S2UT-GP
A 5/15
VGA FRONT END
1-857-031-11 <RX1> A-P5

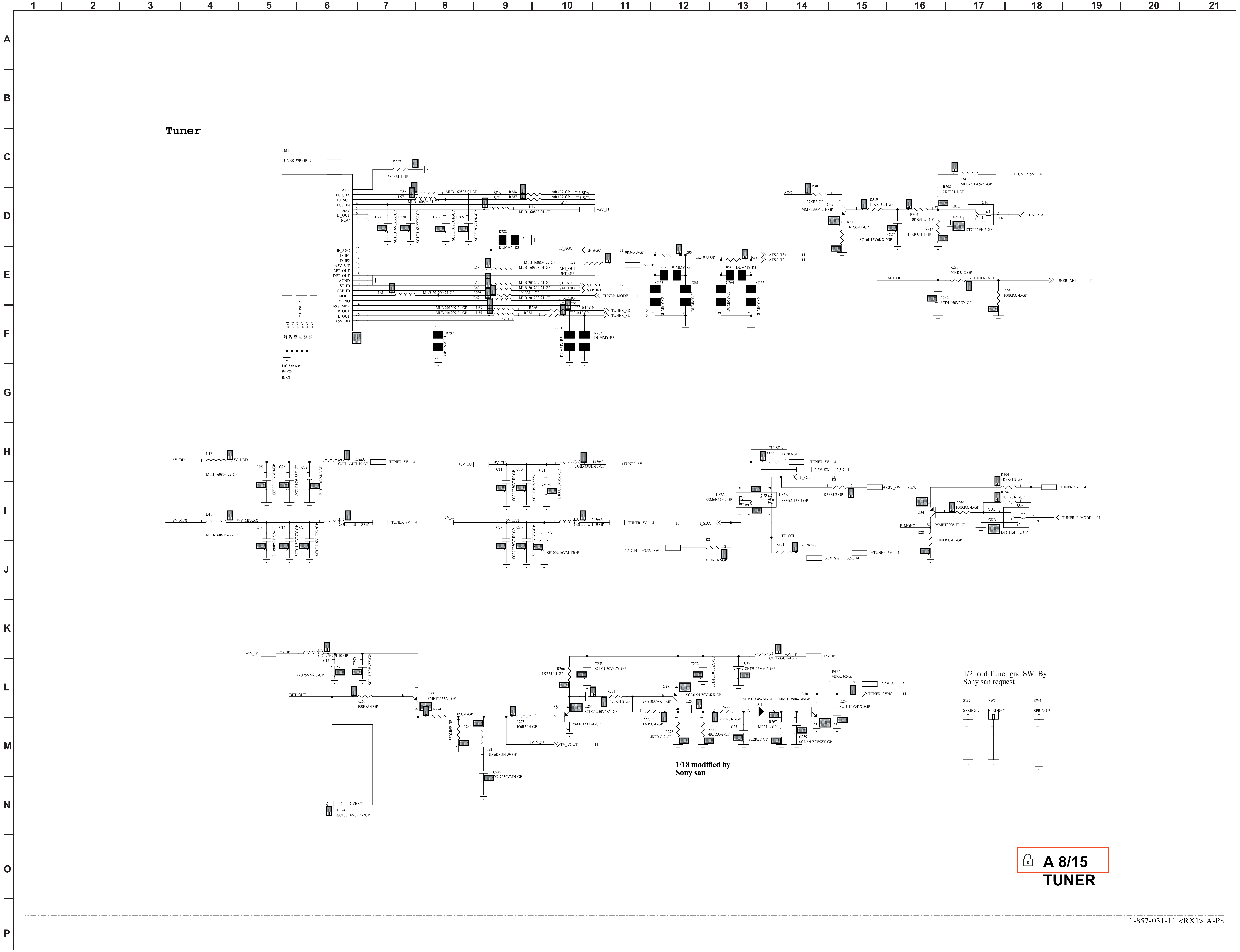
A BOARD SCHEMATIC DIAGRAM (6 OF 15)


HDMI1 I/P
CEC Level Shift to MCU
D42,D156==83.1R004.C8F
HDMI EDID
Common Chock for EMI
TVS Array for ESD
HDMI AUDIO INPUT
A 6/15
HDMI FRONT END
1-857-031-11 <RX1> A-P6

A BOARD SCHEMATIC DIAGRAM (7 OF 15)

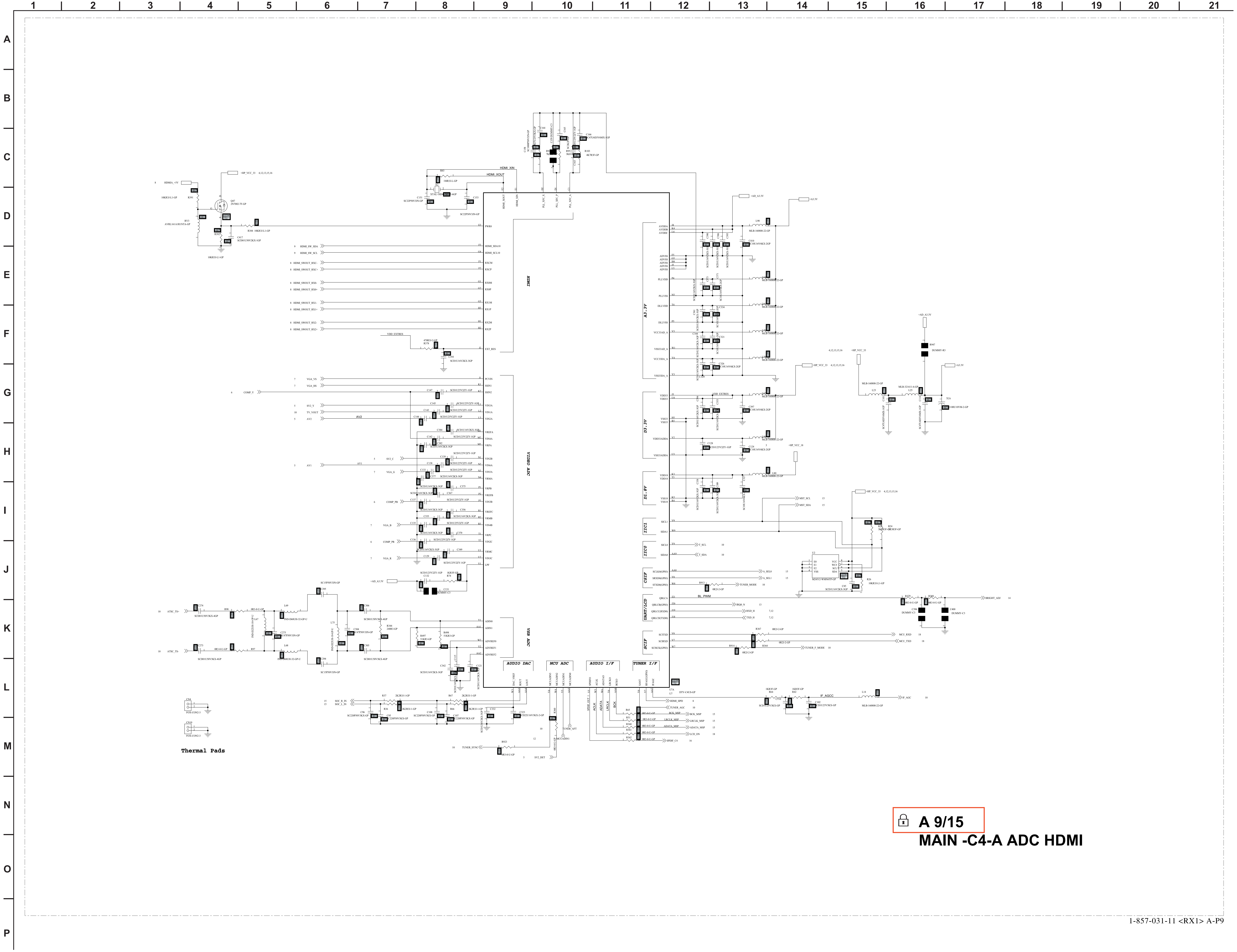

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
HDMI_ASDA
HDMI_ASCL
C181
DUMMY-C3
C182
DUMMY-C3
8,11 HDMI_AHPD
8 HDMI_ASDA
8 HDMI_ASCL
HDMI_ASDA
HDMI_ASCL
HDMI_SWOUT_SDA
HDMI_SWOUT_SCL
HDMI_HPD 8,11
8,11 HDMI_ACLK-
8,11 HDMI_ACLK+
HDMI_ACLK-
HDMI_ACLK+
HDMI_SWOUT_RXC-
HDMI_SWOUT_RXC+
HDMI_SWOUT_RXC- 8,11
HDMI_SWOUT_RXC+ 8,11
8,11 HDMI_AD0-
8,11 HDMI_AD0+
HDMI_AD0-
HDMI_AD0+
HDMI_SWOUT_RX0-
HDMI_SWOUT_RX0+
HDMI_SWOUT_RX0- 8,11
HDMI_SWOUT_RX0+ 8,11
8,11 HDMI_AD1-
8,11 HDMI_AD1+
HDMI_AD1-
HDMI_AD1+
HDMI_SWOUT_RX1-
HDMI_SWOUT_RX1+
HDMI_SWOUT_RX1- 8,11
HDMI_SWOUT_RX1+ 8,11
8,11 HDMI_AD2-
8,11 HDMI_AD2+
HDMI_AD2-
HDMI_AD2+
HDMI_SWOUT_RX2-
HDMI_SWOUT_RX2+
HDMI_SWOUT_RX2- 8,11
HDMI_SWOUT_RX2+ 8,11
For capacitor isolation and level shift
+PS301_VCC 3
U68A
R1002
4K7R3J-2-GP
HDMI_SWOUT_SCL
HDMI_SW_SCL
HDMI_SW_SCL 11
SSM6N17FU-GP
R1003
4K7R3J-2-GP
HDMI_SWOUT_SDA
U68B
SSM6N17FU-GP
HDMI_SW_SDA
HDMI_SW_SDA 11
A 7/15
HDMI SWITCH
1-857-031-11 <RX1> A-P7

A BOARD SCHEMATIC DIAGRAM (8 OF 15)


Tuner
TM1
TUNER-27P-GP-U
I2C Address:
W: C0
R: C1
1/18 modified by
Sony san
1/2 add Tuner gnd SW By
Sony san request
SW2
SW3
SW4
A 8/15
TUNER

1-857-031-11 <RX1> A-P8

A BOARD SCHEMATIC DIAGRAM (9 OF 15)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D
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G
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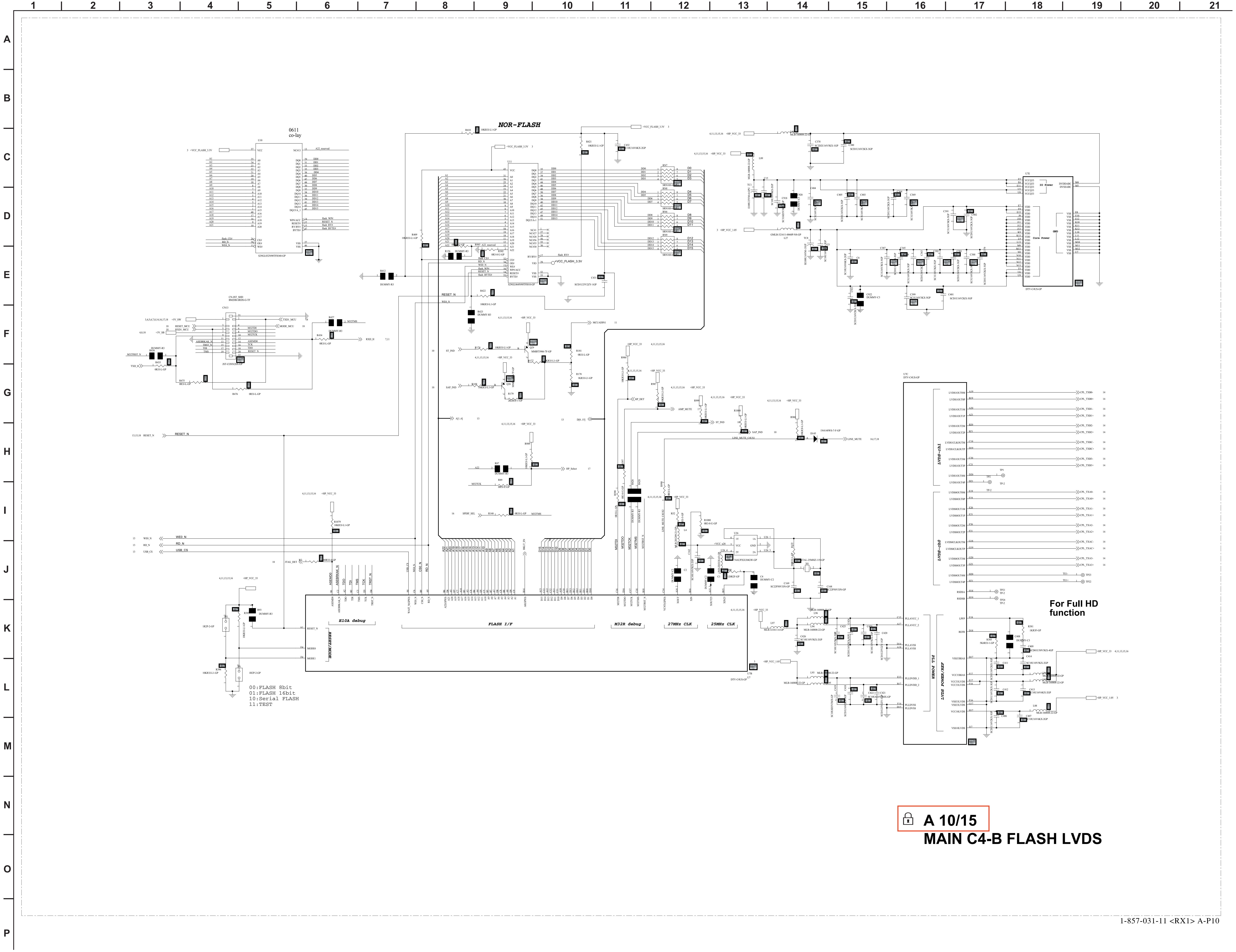
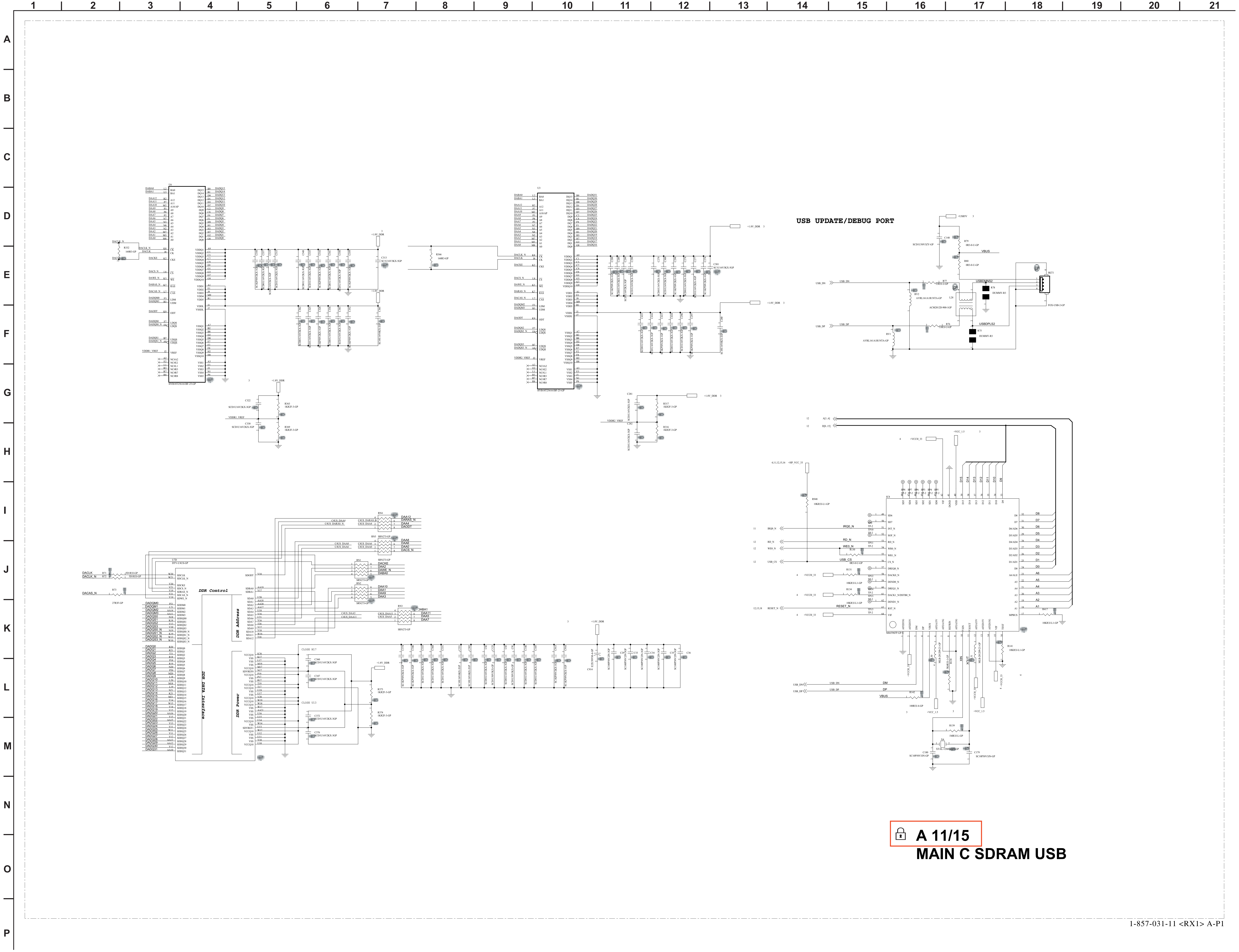
I
J
K
L
M
N
O
P
Thermal Pads
A 9/15
MAIN -C4-A ADC HDMI
1-857-031-11 <RX1> A-P9

A BOARD SCHEMATIC DIAGRAM (10 OF 15)


NOR-FLASH
0611
co-lay
E10A debug
FLASH I/F
M32R debug
27MHz CLK
25MHz CLK
00:FLASH 8bit
01:FLASH 16bit
10:Serial FLASH
11:TEST
For Full HD
function
A 10/15
MAIN C4-B FLASH LVDS
1-857-031-11 <RX1> A-P10

A BOARD SCHEMATIC DIAGRAM (11 OF 15)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20
21
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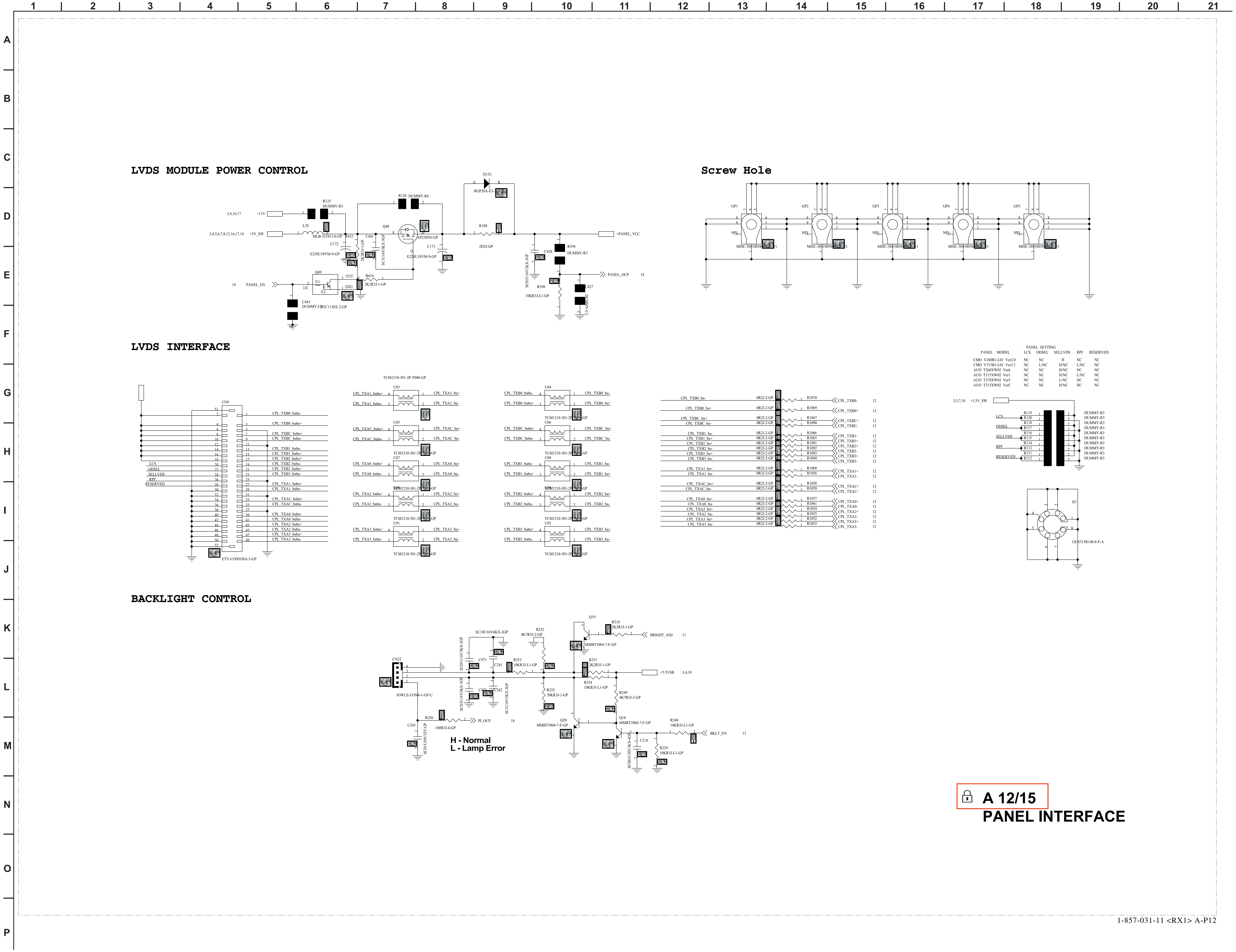
I
J
K
L
M
N
O
P
USB UPDATE/DEBUG PORT
DDR Control
DDR Address
DDR DATA Interface
DDR Power

A 11/15
MAIN C SDRAM USB

1-857-031-11 <RX1> A-P1

A BOARD SCHEMATIC DIAGRAM (12 OF 15)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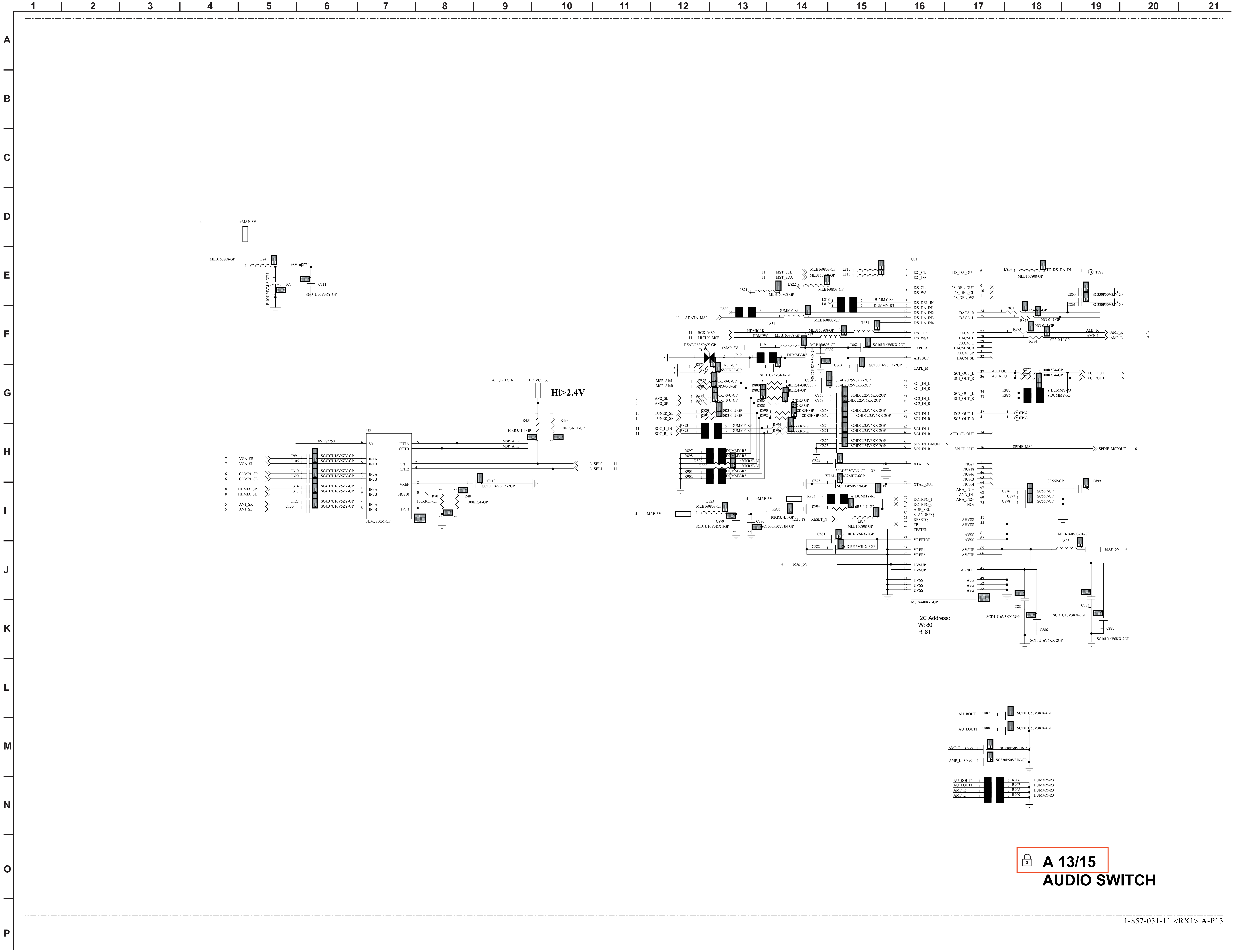
21
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
LVDS MODULE POWER CONTROL
Screw Hole
LVDS INTERFACE
BACKLIGHT CONTROL
+11V
+5V_SW
PANEL_EN
+PANEL_VCC
PANEL_OCP
CN9
ETY-CONN50A-3-GP
CN22
BRIGHT_ADJ
+5.5VSB
PI_OCP
BKLT_EN
3,5,7,10 +3.3V_SW
LCS
ODSEL
SELLVDS
RPF
RESERVED
DUMMY-R3
GP1
GP2
GP3
GP4
GP5
H7
A 12/15
PANEL INTERFACE
1-857-031-11 <RX1> A-P12

H - Normal
L - Lamp Error

PANEL SETTING

PANEL MODEL	LCS	ODSEL	SELLVDS	RPF	RESERVED
CMO V260B1-L01 Ver2.0	NC	NC	H	NC	NC
CMO V315B1-L01 Ver2.1	NC	L/NC	H/NC	L/NC	NC
AUO T260XW02 Ver6	NC	NC	H/NC	NC	NC
AUO T315XW02 Ver1	NC	NC	H/NC	L/NC	NC
AUO T370XW02 Ver5	NC	NC	L/NC	NC	NC
AUO T315XW02 VerC	NC	NC	H/NC	NC	NC

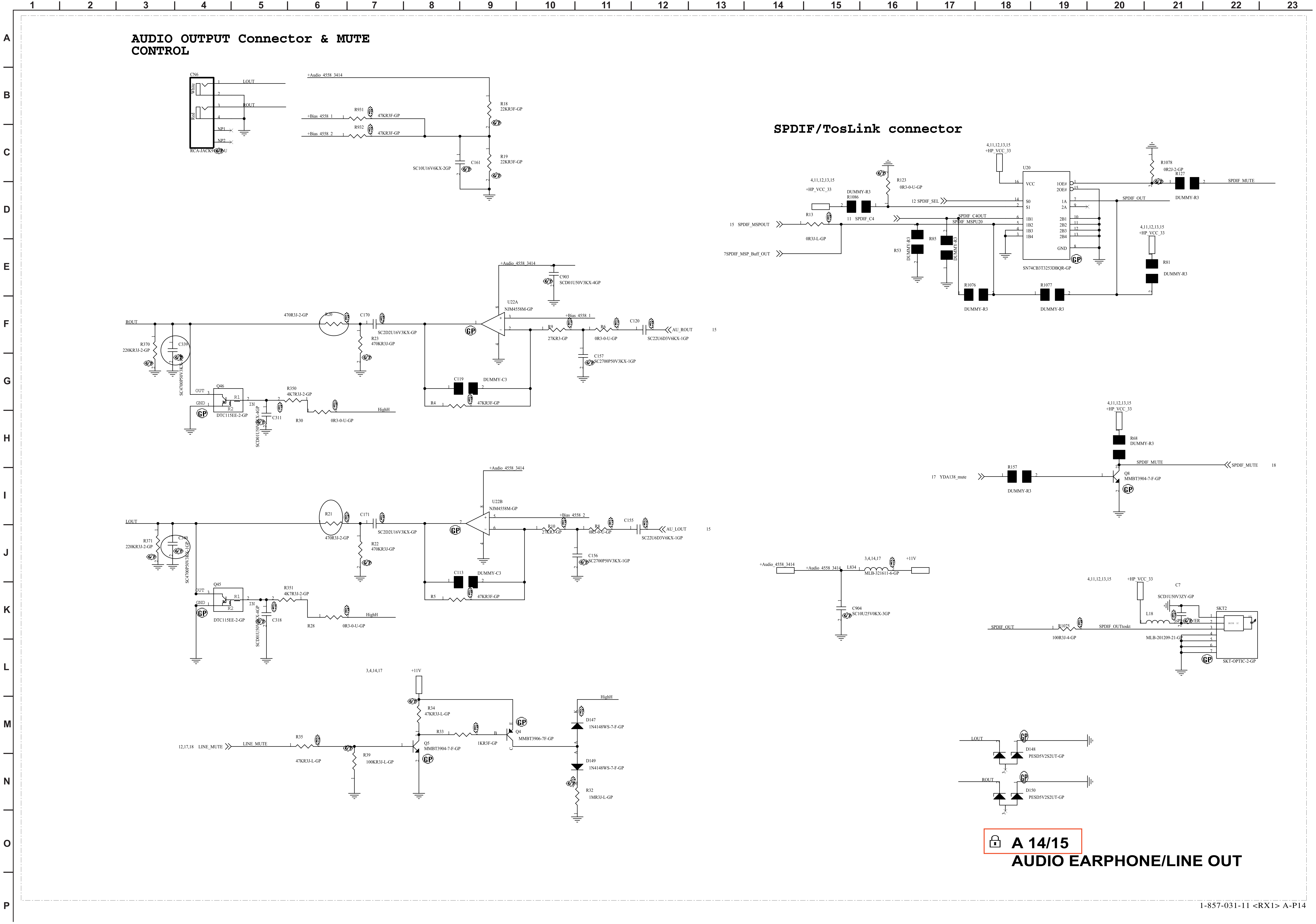
A BOARD SCHEMATIC DIAGRAM (13 OF 15)


Hi>2.4V
NJM2750M-GP
MSP4440K-1-GP
I2C Address:
W: 80
R: 81

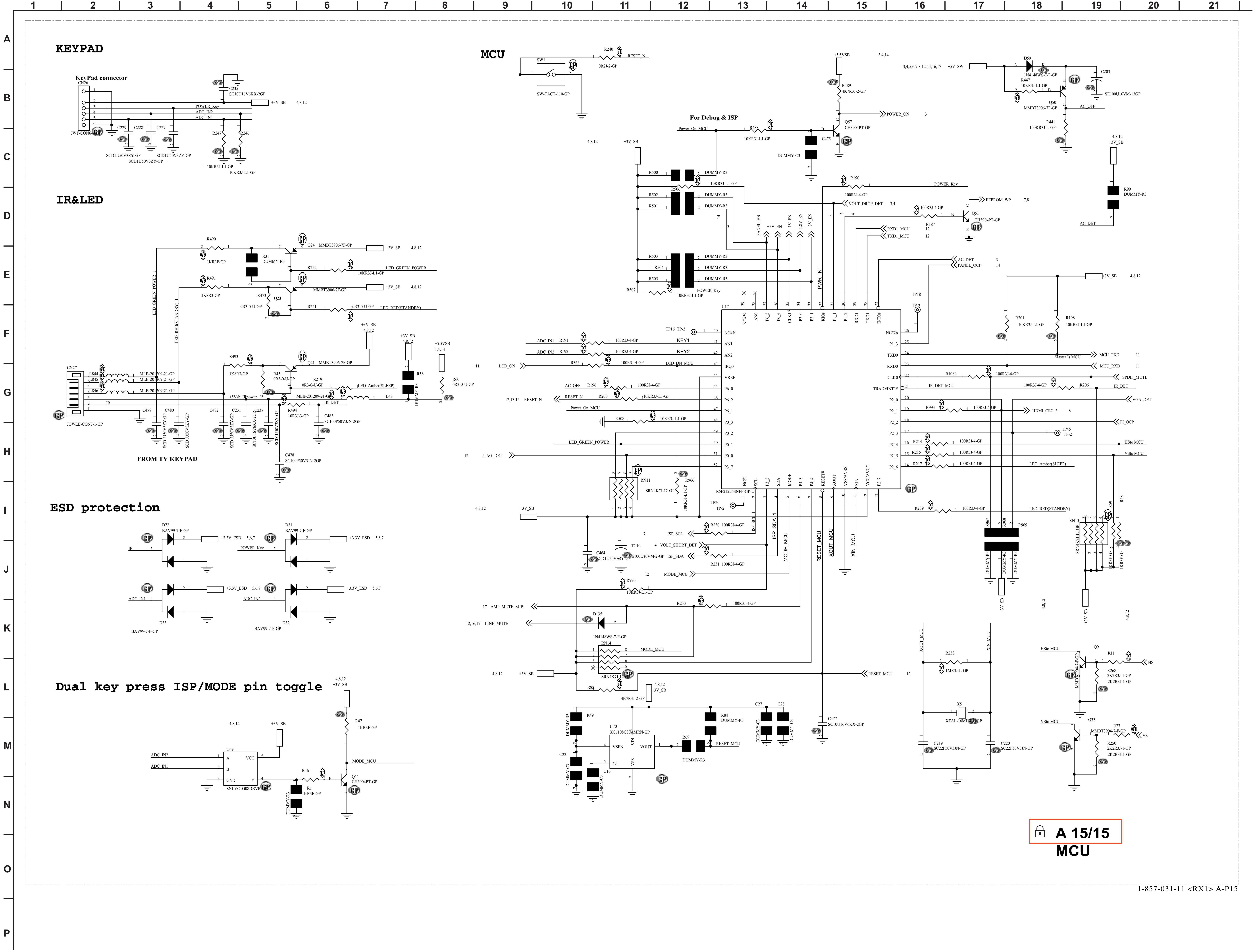
A 13/15
AUDIO SWITCH

1-857-031-11 <RX1> A-P13

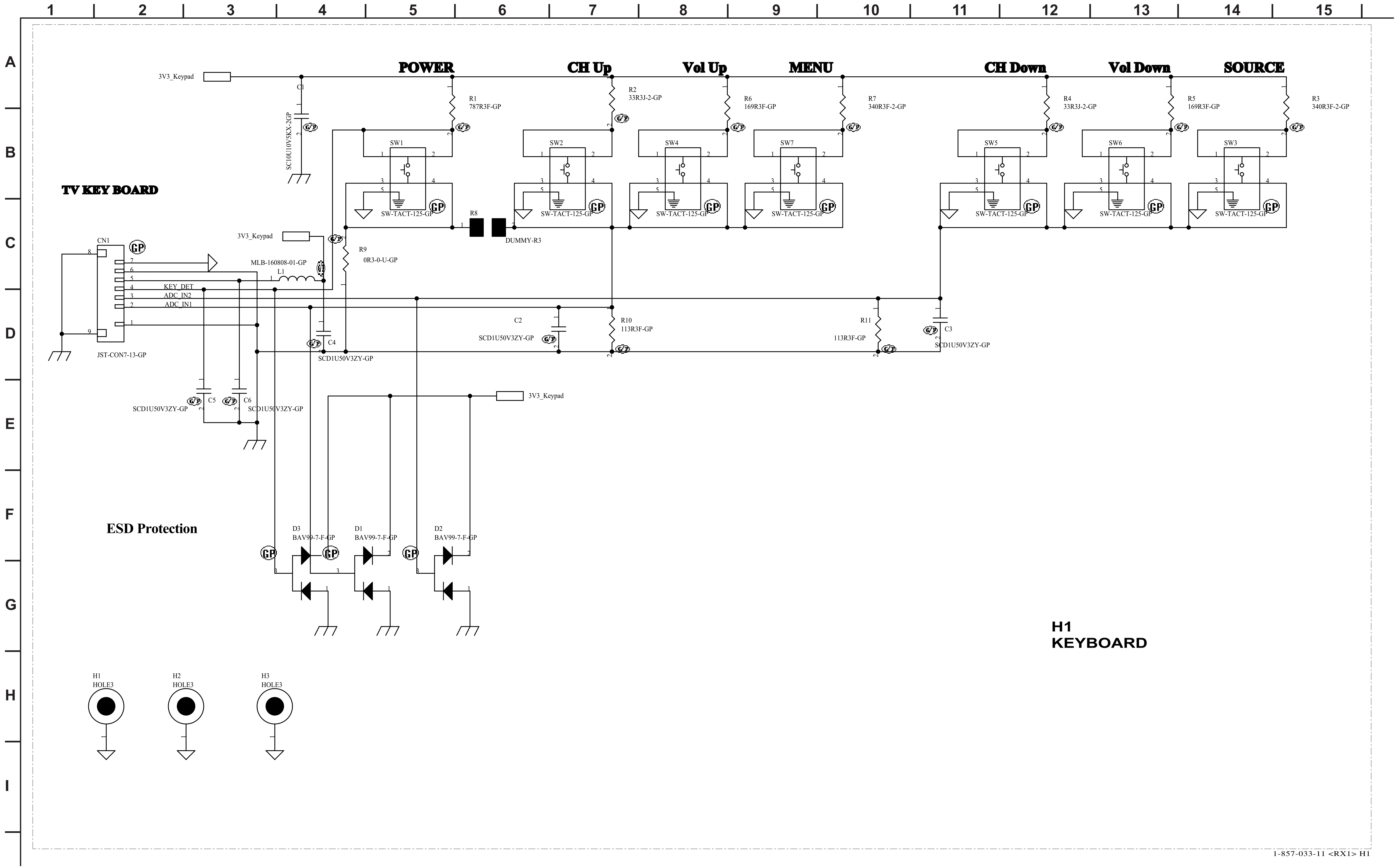
A BOARD SCHEMATIC DIAGRAM (14 OF 15)


AUDIO OUTPUT Connector & MUTE CONTROL
SPDIF/TosLink connector
CN6
RCA-JACK
LOUT
ROUT
R931
R932
47KR3F-GP
+Bias_4558_1
+Bias_4558_2
+Audio_4558_3414
R18
22KR3F-GP
R19
22KR3F-GP
C161
SC10U16V6KX-2GP
U22A
NJM4558M-GP
U22B
NJM4558M-GP
C170
C171
SC2D2U16V3KX-GP
R23
R22
470KR3J-GP
R20
R21
470R3J-2-GP
C120
C155
SC22U6D3V6KX-1GP
AU_ROUT
AU_LOUT
C157
C156
SC2700P50V3KX-1GP
C903
SCD01U50V3KX-4GP
C119
C113
DUMMY-C3
R4
R5
47KR3F-GP
R9
R10
27KR3-GP
0R3-0-U-GP
R370
R371
220KR3J-2-GP
C339
C340
Q46
Q45
DTC115EE-2-GP
R350
R351
4K7R3J-2-GP
C311
C318
R30
R28
HighH
+11V
3,4,14,17
R34
47KR3J-L-GP
R33
1KR3F-GP
Q4
MMBT3906-7F-GP
Q5
MMBT3904-7-F-GP
R35
47KR3J-L-GP
R39
100KR3J-L-GP
12,17,18 LINE_MUTE
LINE_MUTE
D147
D149
1N4148WS-7-F-GP
R32
1MR3J-L-GP
U20
SN74CB3T3253DBQR-GP
4,11,12,13,15
+HP_VCC_33
R123
0R3-0-U-GP
R1086
DUMMY-R3
R13
0R3J-L-GP
15 SPDIF_MSPOUT
7SPDIF_MSP_Buff_OUT
12 SPDIF_SEL
11 SPDIF_C4
SPDIF_C4OUT
SPDIF_MSPU20
R53
R85
R1076
R1077
R1078
0R2J-2-GP
R127
SPDIF_MUTE
SPDIF_OUT
R81
R68
R157
17 YDA138_mute
Q8
MMBT3904-7-F-GP
+Audio_4558_3414
L834
MLB-321611-6-GP
C904
SC10U25V0KX-3GP
C7
SCD1U50V3ZY-GP
L18
MLB-201209-21-GP
SKT2
SKT-OPTIC-2-GP
R1073
100R3J-4-GP
SPDIF_OUTtoskt
D148
D150
PESD5V2S2UT-GP
A 14/15
AUDIO EARPHONE/LINE OUT
1-857-031-11 <RX1> A-P14

A BOARD SCHEMATIC DIAGRAM (15 OF 15)


KEYPAD
KeyPad connector
IR&LED
FROM TV KEYPAD
ESD protection
Dual key press ISP/MODE pin toggle
MCU
For Debug & ISP
U17
A 15/15
MCU
1-857-031-11 <RX1> A-P15

H1 BOARD SCHEMATIC DIAGRAM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15
A
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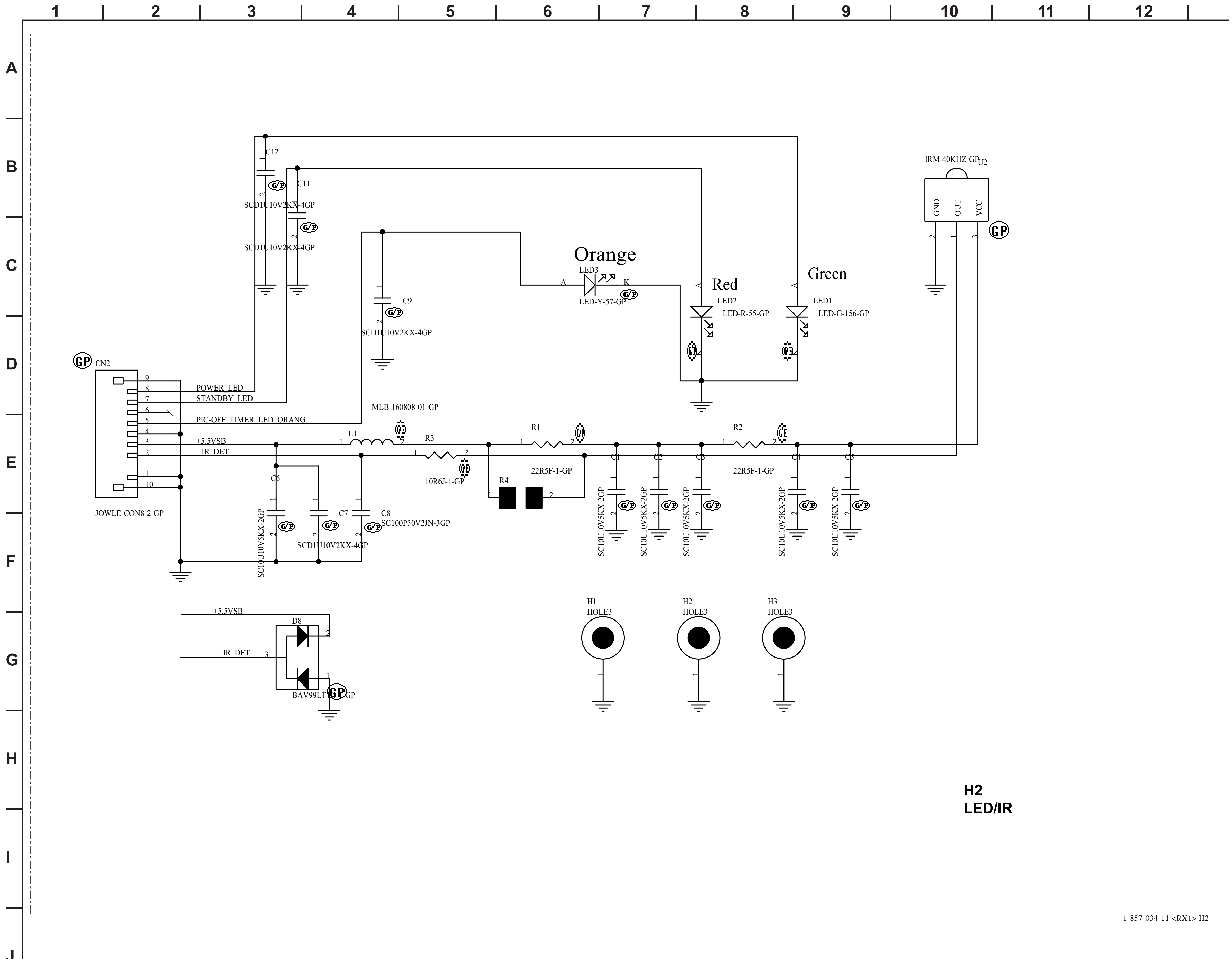
C
D
E
F
G
H
I
POWER
CH Up
Vol Up
MENU
CH Down
Vol Down
SOURCE
3V3_Keypad
C1
SC10U10V5KX-2GP
R1
787R3F-GP
R2
33R3J-2-GP
R6
169R3F-GP
R7
340R3F-2-GP
R4
33R3J-2-GP
R5
169R3F-GP
R3
340R3F-2-GP
SW1
SW2
SW4
SW7
SW5
SW6
SW3
SW-TACT-125-GP
GP
TV KEY BOARD
CN1
JST-CON7-13-GP
KEY_DET
ADC_IN2
ADC_IN1
3V3_Keypad
MLB-160808-01-GP
L1
R8
DUMMY-R3
R9
0R3-0-U-GP
C2
SCD1U50V3ZY-GP
C4
SCD1U50V3ZY-GP
R10
113R3F-GP
R11
113R3F-GP
C3
SCD1U50V3ZY-GP
C5
SCD1U50V3ZY-GP
C6
SCD1U50V3ZY-GP
3V3_Keypad
ESD Protection
D3
BAV99-7-F-GP
D1
BAV99-7-F-GP
D2
BAV99-7-F-GP
H1
KEYBOARD
H1
HOLE3
H2
HOLE3
H3
HOLE3
1-857-033-11 <RX1> H1

☛ H2 BOARD SCHEMATIC DIAGRAM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A
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G
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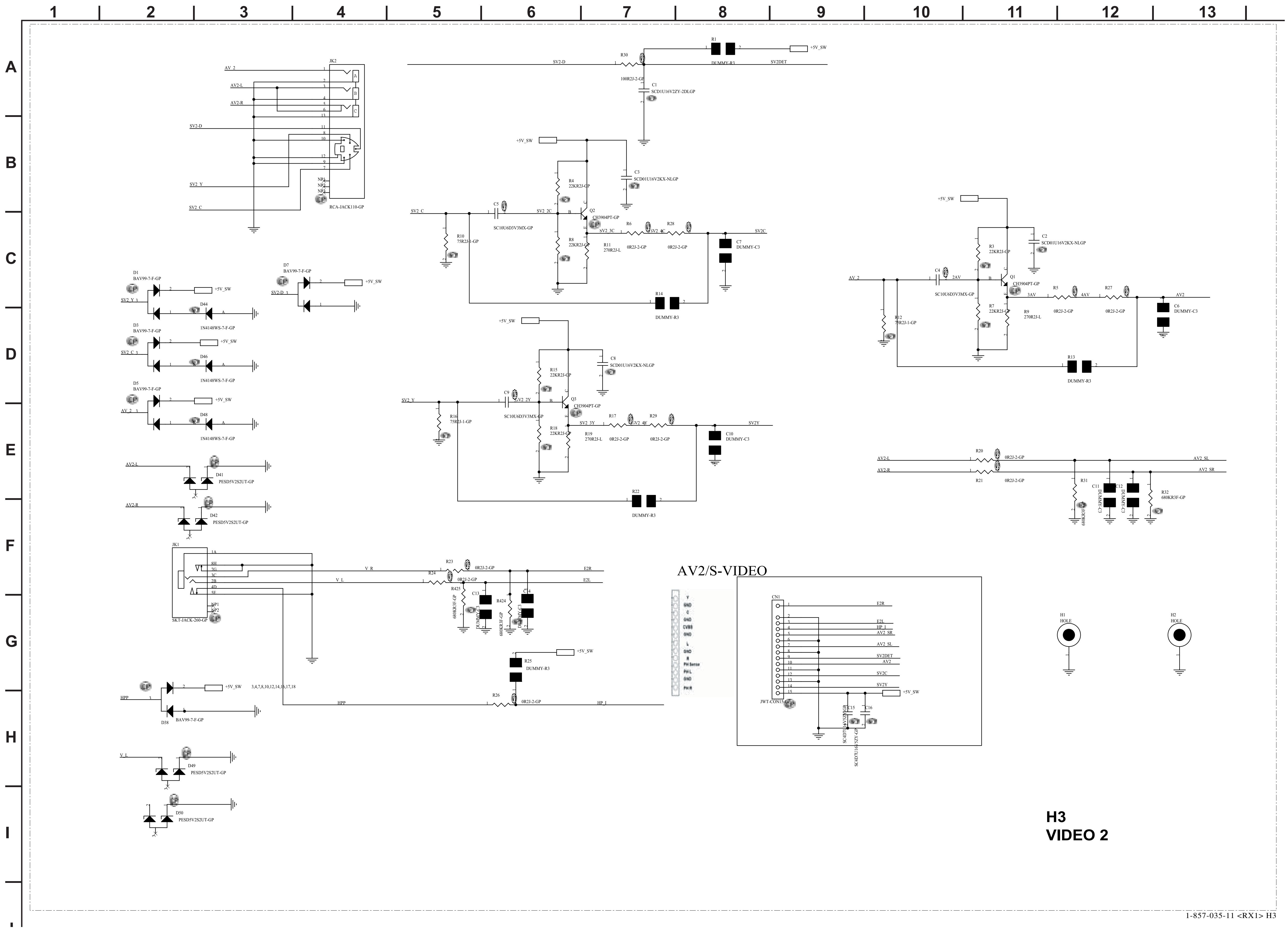
I
J
C12
SCD1U10V2KX-4GP
C11
SCD1U10V2KX-4GP
C9
SCD1U10V2KX-4GP
Orange
LED3
A
K
LED-Y-57-GP
Red
LED2
LED-R-55-GP
Green
LED1
LED-G-156-GP
IRM-40KHZ-GP
U2
GND
OUT
VCC
GP
CN2
POWER_LED
STANDBY_LED
PIC-OFF_TIMER_LED_ORANG
+5.5VSB
IR_DET
JOWLE-CON8-2-GP
MLB-160808-01-GP
L1
R3
10R6J-1-GP
R1
22R5F-1-GP
R4
R2
22R5F-1-GP
C1
C2
C3
C4
C5
SC10U10V5KX-2GP
C6
C7
C8
SC100P50V2JN-3GP
SCD1U10V2KX-4GP
+5.5VSB
IR_DET
D8
BAV99LT1-GP
H1
HOLE3
H2
HOLE3
H3
HOLE3
H2
LED/IR
1-857-034-11 <RX1> H2

☛ H3 BOARD SCHEMATIC DIAGRAM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A
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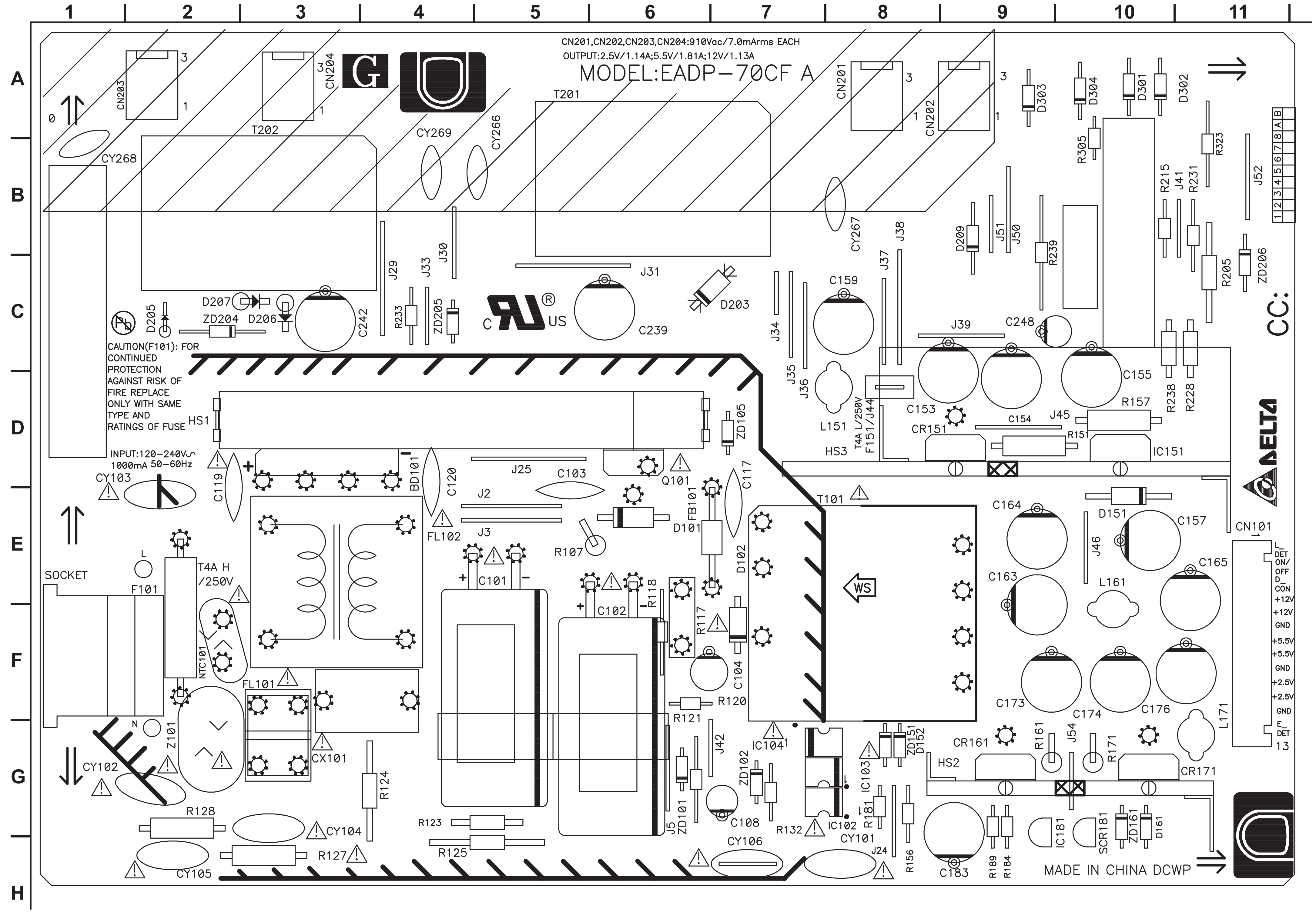
D
E
F
G
H
I
JK2
RCA-JACK110-GP
AV_2
AV2-L
AV2-R
SV2-D
SV2_Y
SV2_C
R30
100R2J-2-GP
C1
SCD1U16V2ZY-2DLGP
R1
DUMMY-R3
SV2DET
+5V_SW
C3
SCD01U16V2KX-NLGP
R4
22KR2J-GP
C5
SC10U6D3V3MX-GP
SV2_2C
Q2
CH3904PT-GP
R10
75R2J-1-GP
R8
22KR2J-GP
R11
270R2J-L
SV2_3C
R6
0R2J-2-GP
SV2_4C
R28
0R2J-2-GP
SV2C
C7
DUMMY-C3
R14
DUMMY-R3
D1
BAV99-7-F-GP
SV2_Y_3
D44
1N4148WS-7-F-GP
D7
BAV99-7-F-GP
SV2-D_3
D3
BAV99-7-F-GP
SV2_C_3
D46
1N4148WS-7-F-GP
D5
BAV99-7-F-GP
AV_2_3
D48
1N4148WS-7-F-GP
C8
SCD01U16V2KX-NLGP
R15
22KR2J-GP
C9
SV2_2Y
SC10U6D3V3MX-GP
Q3
CH3904PT-GP
R16
75R2J-1-GP
R18
22KR2J-GP
SV2_3Y
R19
270R2J-L
R17
0R2J-2-GP
SV2_4Y
R29
0R2J-2-GP
SV2Y
C10
DUMMY-C3
R22
DUMMY-R3
AV2-L
D41
PESD5V2S2UT-GP
AV2-R
D42
PESD5V2S2UT-GP
JK1
SKT-JACK-260-GP
V_R
V_L
R23
0R2J-2-GP
R24
0R2J-2-GP
E2R
E2L
R425
680KR3F-GP
C13
DUMMY-C3
R424
680KR3F-GP
C14
DUMMY-C3
R25
DUMMY-R3
HPP
D38
BAV99-7-F-GP
3,4,7,8,10,12,14,16,17,18
R26
0R2J-2-GP
HP_I
V_L
D49
PESD5V2S2UT-GP
D50
PESD5V2S2UT-GP
C2
SCD01U16V2KX-NLGP
R3
22KR2J-GP
C4
2AV
SC10U6D3V3MX-GP
Q1
CH3904PT-GP
3AV
R5
0R2J-2-GP
4AV
R27
0R2J-2-GP
AV2
R7
22KR2J-GP
R9
270R2J-L
R12
75R2J-1-GP
C6
DUMMY-C3
R13
DUMMY-R3
R20
0R2J-2-GP
R21
0R2J-2-GP
AV2_SL
AV2_SR
R31
680KR3F
C11
DUMMY-C3
C12
DUMMY-C3
R32
680KR3F-GP
AV2/S-VIDEO
Y
GND
C
GND
CVBS
GND
L
GND
R
PH Sense
PH L
GND
PH R
CN1
JWT-CON15-GP
E2R
E2L
HP_I
AV2_SR
AV2_SL
SV2DET
AV2
SV2C
SV2Y
+5V_SW
C15
C16
SC4D7U16V5ZY-GP
SC4D7U16V5ZY-GP
H1
HOLE
H2
HOLE
H3
VIDEO 2
1-857-035-11 <RX1> H3

G BOARD SCHEMATIC DIAGRAM (THE SCHEMATIC FOR THIS BOARD IS NOT AVAILABLE)

G [POWER SUPPLY]

COMPONENT SIDE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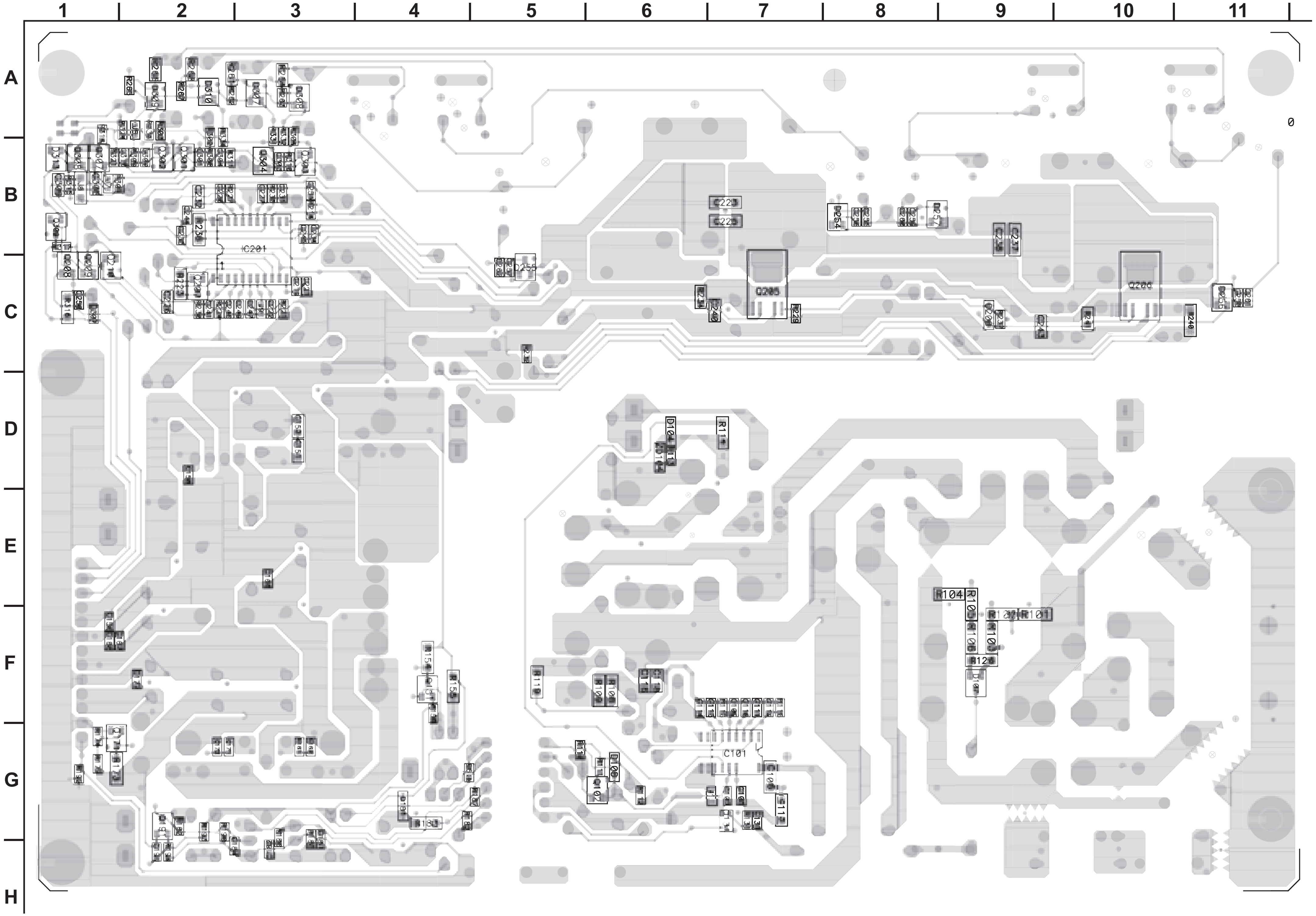
H
CN201,CN202,CN203,CN204:910Vac/7.0mArms EACH
OUTPUT:2.5V/1.14A;5.5V/1.81A;12V/1.13A
MODEL:EADP-70CF A
CN203
CN204
T202
CY268
CY269
CY266
T201
CN201
CN202
D303
D304
D301
D302
R305
R323
R215
J41
R231
J52
1 2 3 4 5 6 7 8 A B
CY267
J38
D209
J51
J50
R239
R205
ZD206
J29
J33
J30
J31
D207
D205
ZD204
D206
C242
R233
ZD205
C US
C239
D203
J34
C159
J37
J39
C248
CC:
CAUTION(F101): FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RATINGS OF FUSE
HS1
ZD105
J35
J36
L151
T4A L/250V
F151/J44
C153
C155
R157
R238
R228
C154
J45
CR151
R151
HS3
IC151
INPUT:120-240V~ 1000mA 50-60Hz
CY103
C119
BD101
C120
J25
C103
Q101
C117
J2
FB101
T101
C164
D151
C157
CN101
L_ DET
ON/ OFF
D_ CON
+12V
+12V
GND
+5.5V
+5.5V
GND
+2.5V
+2.5V
GND
E_ DET
13
FL102
J3
R107
D101
D102
J46
C165
SOCKET
L
F101
T4A H /250V
C101
C102
R118
R117
WS
C163
L161
NTC101
FL101
C104
R120
C173
C174
C176
L171
N
Z101
R121
J42
IC104
ZD151
D152
CR161
R161
J54
R171
CX101
HS2
CR171
CY102
ZD102
IC103
R124
R128
CY104
R123
J5
ZD101
C108
R132
IC102
R181
CY101
C181
SCR181
ZD161
D161
R125
R127
CY105
CY106
J24
R156
C183
R189
R184
MADE IN CHINA DCWP

G [POWER SUPPLY]

CONDUCTOR SIDE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A
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G
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IC201
Q205
Q206
C101
R104
R101

SECTION 4: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

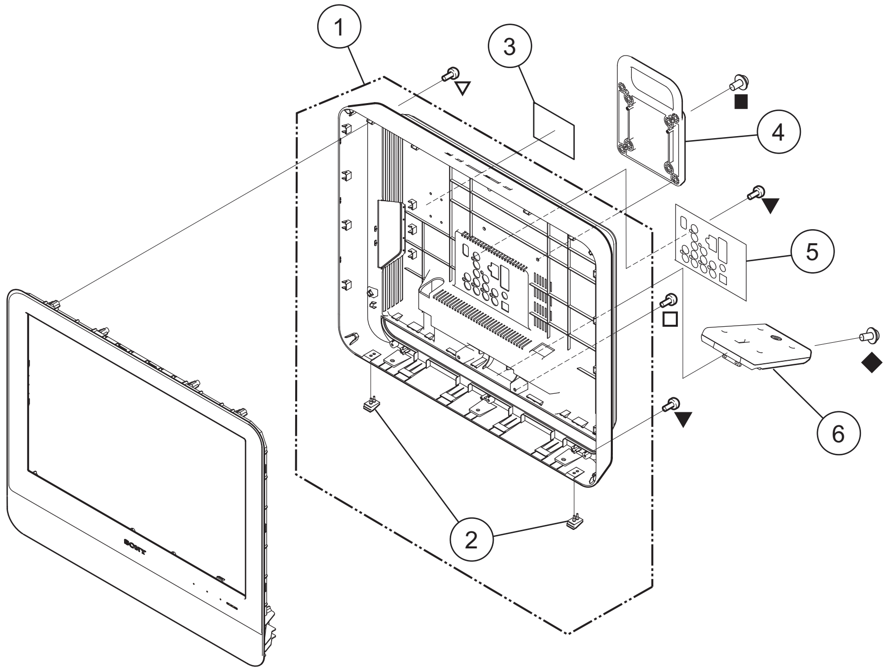
NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

NOTE: The components identified by a red outline and a 🔒 mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced.
See Appendix A: Encryption Key Components in the back of this manual.

4-1. REAR COVER ASSEMBLY AND STAND ASSEMBLY

(Check the Sony Electronics Service Information website for any additional service related issues for this model.)

■	2-580-601-01	SCREW +PSW M4X12
□	2-580-639-01	SCREW, +BVTP 4X12
▼	7-685-647-79	SCREW, +BVTP 3X10
▽	7-685-665-14	SCREW, +BVTP 4X25
◆	2-580-603-01	SCREW, +PSW M4X16



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
1	X-2189-738-1	COVER, REAR ASSY	[2]
2	3-298-481-01	FOOT, RUBBER	
* 3	3-298-494-01	LABEL, MODEL NUMBER (US, CANADA ONLY)	
* 3	3-870-868-01	LABEL, MODEL NUMBER (MEXICO ONLY)	
4	3-288-680-01	HANDLE(AB)	
5	3-298-493-01	LABEL, TERMINAL	
6	X-2189-739-1	STAND ASSY	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

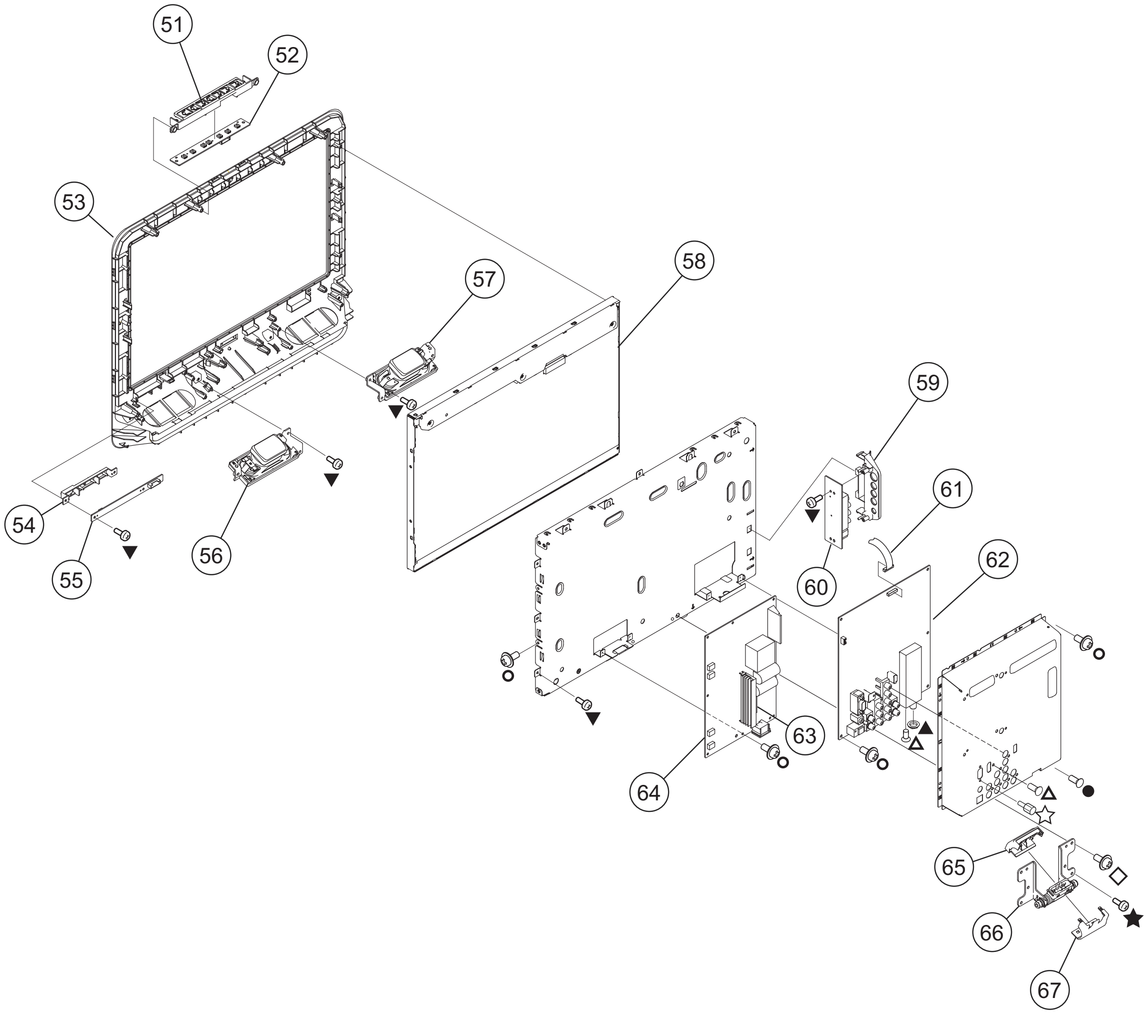
NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

NOTE: The components identified by a red outline and a 🔒 mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced.
See Appendix A: Encryption Key Components in the back of this manual.

4-2. CHASSIS

(Check the Sony Electronics Service Information website for any additional service related issues for this model.)

▼	7-685-647-79	SCREW, +BVTP 3X10	●	3-344-561-02	FH, 4X5
○	4-382-854-51	SCREW, M3X6	△	4-635-303-01	FH, 3X4
★	2-580-641-01	SCREW, +BVTP 4X21	▲	3-682-691-21	NUT(HEX)
☆	4-635-966-21	SCREW (HEX)	◇	2-580-603-01	SCREW, M4X16



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
51	3-298-488-01	TOUCH-KEY, FUNCTION	
52	1-857-033-11	H1 BOARD, MOUNTED	
☛ 53	X-2189-737-1	FRONT BEZEL ASSY (WHITE)	
☛ 53	X-2190-522-1	FRONT BEZEL ASSY (BLACK)	
☛ 53	X-2319-147-1	FRONT BEZEL ASSY D (ORANGE)	
☛ 53	X-2319-149-1	FRONT BEZEL ASSY L (BLUE)	
☛ 53	X-2319-148-1	FRONT BEZEL ASSY G (GREEN)	
☛ 53	X-2319-150-1	FRONT BEZEL ASSY P (PINK)	
54	3-298-477-01	INDICATOR, LED	
☛ 55	1-857-034-11	H2 BOARD, MOUNTED	
56	1-826-940-21	SPEAKER R (10X4CM)	
57	1-826-940-11	SPEAKER L (10X4CM)	
58	1-802-694-11	LCD PANEL (19INCH WXGA TFT)	
59	3-298-487-01	COVER, SIDE BRACKET	
☛ 60	1-857-035-11	H3 BOARD, MOUNTED	
61	1-910-044-58	CONNECTOR ASSY LVDS 19	
🔒 62	1-857-031-11	A BOARD, MOUNTED	
63	1-523-010-11	FUSE, TIME-LAG (4A/250V)	
64	1-857-032-11	G BOARD, MOUNTED	
65	3-298-485-01	COVER, HINGE-TOP	
66	3-298-484-01	HINGE	
67	3-298-486-01	COVER, HINGE-BOTTOM	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

NOTE: The components identified by a red outline and a 🔒 mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced.
See Appendix A: Encryption Key Components in the back of this manual.

REF. NO.	PART NO.	DESCRIPTION	VALUES
		ACCESSORIES AND PACKING	
*	3-213-734-01	BAG PROTECTION	
*	3-298-491-01	CARTON, INDIVIDUAL	
*	3-870-867-01	CUSHION LOWER, 19ABS	
*	3-298-492-01	CUSHION UPPER, 19ABS	
	3-297-702-11	GUIDE, QUICK SETUP (ENGLISH)	
	3-297-702-21	GUIDE, QUICK SETUP (FRENCH)	
	3-297-702-31	GUIDE, QUICK SETUP (SPANISH)	
	3-297-704-11	MANUAL INSTRUCTION (WALL MO)	
	3-297-703-12	MANUAL, INSTRUCTION (ENGLISH)	
	3-297-703-22	MANUAL, INSTRUCTION (FRNECH)	
	3-297-703-32	MANUAL, INSTRUCTION (SPANISH)	
⚠	1-835-077-11	POWER-SUPPLY CORD SET	
		REMOTE COMMANDER	
	1-480-722-11	REMOTE COMMANDER (RM-YD025) (BLACK)	
	9-885-110-88	COVER BATTERY (for RM-YD025) (BLACK)	
	1-480-722-21	REMOTE COMMANDER (RM-YD025W) (WHITE)	
	9-885-117-91	COVER BATTERY (WHITE) (for RM-YD025W) (WHITE)	

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Sony Technology Center
Technical Services
Service Promotion Department

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APPENDIX A: ENCRYPTION KEY COMPONENTS

Encryption key components developed by Sony Corporation contain confidential information, and shall be handled under the non-disclosure obligations provided in the applicable agreement with Sony Corporation (and/or its subsidiary).

As part of this agreement specific instructions must be adhered to whenever a Circuit Board containing encryption key components is repaired and/or replaced pursuant to the following:

1) **In the service manual the Circuit Board(s) containing encryption key components shall be identified with a red outline and a 🔒.**

2) **Only repair boards or components listed in the service manual shall be utilized for replacement and/or repair.**

3) **Disassembly, decryption, or reverse-engineering component(s) is strictly prohibited.**

4) **Any board in which the Servicer replaces an encryption key component must be placed back into the set it orignally came from and the replaced defective component MUST BE DESTROYED. Boards cannot be swapped.**

5) **If a Circuit Board identified with a red outline and a 🔒 in the service manual is deemed to be defective:**

    a) **and if a core charge is imposed and is covered under the product warranty, the defective un-repaired or modified board MUST BE RETURNED to Sony.**

    b) **and if the core charge is NOT covered under the product warranty, the defective un-repaired or modified board MUST BE DESTROYED.**

5) **If a unit is destroyed (such as field scrap), the Circuit Board identified with a red outline and a 🔒 in the service manual MUST BE DESTROYED.**

SERVICE MANUAL RX1 CHASSIS

In an effort to reduce the size of this pdf file the tiled schematics are not attached to this Service Manual. To receive a complete set of the tiled schematics for this manual please submit a request to the Service Promotion Department at Service_Promotion@am.sony.com.